Kharkiv National Medical University

Department of Psychiatry, Narkology and Medical Psychology

WORKBOOK

MANUAL FOR INDIVIDUAL WORK OF STUDENTS

PSYCHIATRY

Part 1

Student _____

Faculty _____

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CLASS №1
THE SUBJECT AND TASKS OF PSYCHIATRY AND NARKOLOGY. ORGANIZATION OF PSYCHIATRIC AID. METHODS OF EXAMINATION OF MENTAL DISEASE. CLASSIFICATION OF MENTAL DISEASE. REGISTER MENTAL DISEASE. DISTURBANCES OF SENSATIONS AND PERCEPTIONS

Psychiatry is the medical science dealing with the study of diagnosis, etiology, pathogenesis and rate of mental diseases, as well as organization of the psychiatric aid.

Psychiatry (Greek *psyche* – soul, *iatreia* – treatment) = treatment of the soul.

Tasks of psychiatry:

1. Study of the rate, conditions of origination, nosological structure and clinical peculiarities of mental diseases.
2. Study of the etiology and pathogenesis of mental diseases.
3. Treatment and prevention of mental diseases.
4. Social-labour rehabilitation of patients.
5. Labour, forensic and military psychiatric examination.
6. Carrying out of sanitary-educational and psychohygienic measures among the population.

Main sections of modern psychiatry:

1. General (study and treatment of mental illness)
2. Pediatric, juvenile
3. Geriatric
4. Narcology
5. Forensic psychiatry
6. Social psychiatry
7. Psychotherapy
8. Psychopharmacotherapy
9. Sexual pathology
10. Suicidology
11. Penitentiary psychiatry (It examines the characteristics of mental disorders in people who are in prison, risk factors for committing illegal actions).
12. Transcultural psychiatry (especially comparative studies of psychiatric disorders in people of different nations, cultures and social systems).

HISTORY OF DEVELOPMENT
A brief overview of the history of psychiatry

Mental illness exists as long as humanity exists. In the pre-scientific period of the history of medicine prevalent primitive theological understanding of the anomalous behavior of the patients, which is reflected in myths and legends. For example, the Bible describes cases of mental disorders in the Babylonian king Nebuchadnezzar, in the Jewish King Saul (melancholy and epilepsy).

The origins of the birth of psychiatry associated with the great physician and philosopher of ancient Greece – Hippocrates, which is rightly considered the founder of scientific medicine. Hippocrates first claimed that the mentally ill suffer from the brain, and so they should be treated by the doctor. Hippocrates believed that the mental characteristics of man are determined by mixing 4 main juices of a living organism (blood, phlegm, yellow and black bile), depending on the predominance of one of them he distinguished between 4 types of temperaments: sanguine, phlegmatic, choleric, melancholic. Hippocrates looked at mental illness as treatable and recommended sick body rest, diet, baths, cold douche, light exercise and light gymnastics, emetic and purgative.

Heavily influenced by Hippocrates, was Aristotle – a philosopher, and pay attention to the study of mental illness. He noted the tendency to violence epileptics and melancholic considered gifted others.

Aretha, the ancient physician, described epilepsy, melancholia, mania, their clinic, course and outcomes, as well as acute psychosis in somatic diseases.

Claudius Galen studied the brain, the seat of his mind thought, thoughts localized in the heart, the desire – in the liver. Mental illness Galen differentiated between on acute and chronic, related to the first feverish delirium, to the second – melancholy.

The advent of a new era, the Middle Ages, slowed down the development of science. During this period was dominated by the influence of the church on the diabolical obsession of apostasy, of holiness and possessed with a devil, so any violation of the psyche is not assessed as a disease but as a result of voluntary intercourse with the devil.

In the early Middle Ages began to emerge and progressive views on the nature of mental illness. So, the famous Arab scholar Avicenna considered disease infringement of mental activity, and called for their treatment. These views Avicenna implemented in the construction of hospitals for the mentally ill.

At the end of XVII – beginning of XVIII century in connection with the expansion of cities and crowded public authorities ordered the relatives of patients to protect the peace living nearby. Patients were tied, chained, locked in rooms. In Europe, there are shelters for the mentally ill. However, although these institutions patients have not executed and burned, the attitude towards him was harsh and cruel. An example of this is organized in England psychiatric institution – Bedlam, whose name became a household word in the future. The Bedlam patients were kept in small rooms with stone floors and no furniture, chained to the walls.

In the era of the rise of capitalism in Europe, there is a gradual liberation of science from the influence of theology. Creates prerequisites for the formation of psychiatry as a science. In the XVIII century there have been major changes in the organization of mental health care. This reflected the social changes that have occurred in France during the period of the bourgeois revolution. French philosophers (Lammert, Diderot, Cabanis, Holbach, Helvetius) had a great influence on medicine. According to the Treaty of Cabanis, mental illnesses are brain diseases. Now you can transform the legislative provisions of the mentally ill.

French psychiatrist Philippe Pinel (1745–1826), the chief doctor psychiatric hospital Bicetre achieved at the National Convention of the right to withdrawal of chains with the mentally ill and went down in history as the "father of modern psychiatry." F. Pinel – founder of psychiatry in France, its main merit is that he was "elevated to the rank of a crazy person of unsound mind". The closest disciple Pinel, Zh.Eskerol, laid the foundation for the scientific and clinical psychiatry, legalized the mandatory medical examination of persons placed in psychiatric institutions. Eskerol initiated the study of progressive paralysis, set of somatic symptoms in the clinic of psychosis, delusions and hallucinations differentiated.

Reforms initiated by Pinel, continued in England Connolly. He was the professor of University of London, which declared the principle of "unconstrained" mentally ill.

In the middle and second half of the XIX century, psychiatry has made significant progress. The Viennese psychiatrist T. Meinert described amentia, German psychiatrist Karl Wernicke first described alcoholic hallucinosis, introduced the concept of overvalued ideas, pseudohallucinations, hallucinosis, hallucinatory confusion.

At the end of the XIX century, wider development receives symptomatic psychiatry: a systematic delusional psychosis (C. Magnan), circular insanity, catatonia (K. Kahlbaum) hebephrenia (E. Hecker) geboidofreniya (K. Kahlbaum) diznoyya (S.S. Korsakov). Simptomatologicheskoe direction limited to the description of symptoms, symptom, in which mental illnesses manifest themselves, without taking into account the causes and mechanisms of development. This period of world psychiatry is defined as the development of preclinical but two disease entities have been described already in this period: progressive paralysis (AG Bell), alcoholic psychosis polinevrichesky (S.S. Korsakov). A major role in shaping the views of nosology in psychiatry have played the works of the German scientist E. Kraepelin. Kraepelin stated that mental illness – a natural biological process, having a specific etiology of specific mental and physical symptoms, postmortem basis, and for the typical pre-ordained outcome. He singled out two endogenous mental illness – dementia praecox (demence precose) and manic-depressive psychosis.

In XX century, has spread the teachings of Karl Bonhoeffer exogenous types of reactions in the form of disturbance of consciousness of the effect of exogenous harmful factors (infection, intoxication). In 1911, Swiss psychiatrist E. Bleuler suggested the name schizophrenia disease described Kraepelin. A.Altsgeymer described the histopathology of progressive paralysis, he has allocated a special form of early dementia, named after him. Great influence on the development of mental health in Europe and especially in the United States had the teachings of Freud. The main point of this trend is the

recognition of the prevalence of psychiatric unconscious over the conscious. The unconscious, according to Freud, is instinct, primarily sexual, which cause all the psychic activity of man. According to Freud's theory, the conflict that arises between the subconscious and the unconscious, if it is not disclosed, and not react, can cause neurosis.

History of Ukrainian psychiatry

In Slavic countries related to the mentally ill it was more humane. Some patients have proclaimed "holy fools", "holy", and tried to talk to them to perceive the various predictions and advice.

Already in Kievan Rus were established organizational forms of care for the mentally ill. Since 1775 began to open psychiatric units in hospitals. Ukraine's first psychiatric hospital was opened in 1796 in Kharkov ("Saburov's Dacha").

In 1834, Professor of the Department of Kharkov University Surgery PA Butkovskiy wrote the first textbook on psychiatry for the Slavic peoples "Mental illness". The official teaching of psychiatry at the medical faculties was proclaimed in 1835, but this rate continued reading teachers of other specialties.

Korsakov created the original classification of mental diseases where individual nosological forms are described (dystonia, psychoneurotic alcoholic psychosis). KH Kandinsky, who wrote the classic work "On pseudohallucinations", which has become a kind of guide to the psychopathology of delusions, hallucinations and pseudohallucinations.

The first independent chair of psychiatry and neurology was established in 1877 in Kharkov University, led by her professor PI Kovalevsky, known for his work in psychology, anatomy, psychographics, who proposed his own classification of mental disorders. Since 1883, PI Kovalevsky publishes first domestic journal "Archives of Psychiatry, Neurology and Forensic psychopathology."

An important role played by such scholars in the development of Ukrainian psychiatry as A.J. Anfimov, K.I. Platonov, V.P. Protopit, EA Popov working in Kharkov.

ORGANIZATION OF PSYCHIATRIC AID

"The good of the patient – the supreme law" (Salus aergoti suprema lex) – a basic principle which must use all doctors, especially psychiatrists. The significant role of ethics in professional work of the psychiatrist as the nature of his relationship with the patient special, creating a specific moral issues. These issues are determined by the fact that psychiatry has the means of human exposure.

One of the tasks of psychiatry – enhance the social acceptance of the mentally ill, overcoming barriers of bias, exclusion and regulation of social sanctions against the mentally ill. Unlike other medical disciplines, psychiatry applies in respect of certain categories of patients coercion, creating a frightening aura about psychiatry, causing distrust of society and the natural tendency to protect itself from undue interference in their lives.

The object of psychiatric ethics is to limit the scope of coercion in the provision of mental health care to the limits determined by medical necessity that ensures respect for human rights. Do not use coercive measures in relation to patients who do not pose a threat to themselves or others. patient burdensome to others should not be a prerequisite for the use of coercion. The duration of stay of the patient in the hospital should be determined only by his mental state. Do not delay in hospital patients, as it can cause hospitalism syndrome. It is important that patients are as long as possible socially adapted as continuing to work patients arrive at the hospital less often, and the time spent in hospital is shorter than that of patients who left work.

When the patient returns from the hospital is necessary to consider the conditions in which they live at home. During the patient stays in the hospital doctor should monitor the ratio of staff to the patient, to avoid the possibility of being subjected to inappropriate or disciplinary action. Do not use the restriction of patients unless absolutely necessary. Studies in different countries have shown that while decreasing of disciplinary measures in psychiatric departments, unlimited visits of relatives, provide home vacation, they reduce the number of aggressive and auto-aggressive acts of mental sick patients.

In the relationship doctor – patient is the most attractive model, when the doctor is not a dispassionate functionary and counselor, a friend, a teacher, which helps the patient to choose the only correct decision. However, as an alternative with respect to the individual patient, paternalism ("parent" model), and the partnership is not alternative to psychiatry in general. Specificity and complexity psy-

chiatry is that even with respect to one and the same patient can change these models to each other at different stages of the disease. Therefore, one of the tasks of psychiatric ethics is to establish the optimum relationship between doctor and patient, promoting implementation of the interests of the patient, taking into account the specific clinical situation.

World public care about issues prevent possible abuse in the provision of mental health care. Inhuman attitude towards the mentally ill, unfortunately, there are also today in many countries and cultural regions and political systems. Misuse of psychiatry – is the intentional infliction of moral, physical or other damage to the person by applying to it the medical measures that are not shown and necessary, or by non-use of medical measures that are shown and necessary, based on the state of his mental health.

The main regulations on misuse of psychiatry are Hawaiian Declaration, adopted by the World Psychiatric Association in 1977, and "Principles for the protection of persons suffering from mental illness and improving health in the field of psychiatry", adopted by the UN General Assembly in 1991. Any abuse of psychiatry your knowledge incompatible with professional ethics.

The psychiatrist can not use his abilities against the health interests, without justification and the need to use medical measures. You can not put a psychiatric diagnosis only based on the divergence of views and opinions. In his work, the psychiatrist should consider only his medical conditions, medical debt and the law. Doctor should be independent in his decisions.

The Law of Psychiatric Aid.

In Ukraine, the Law on Psychiatric Aid was adopted; it regulates the rights of mental patients, the rules for giving them aid, as well as clearly determines indications for hospitalizing patients to psychiatric establishments. The basic clauses of the Law on Psychiatric Aid proceed from the statement that mental patients who are citizens of our country enjoy all the rights declared in the Constitution of Ukraine.

The Law on Psychiatric Aid is based on 10 main principles worked out by the Mental Health Department of the World Health Organization. These principles are as follows:

1. Development of mental health and prevention of mental disorders.

Every person should look after his mental well-being and take measures for eliminating causes of mental disorders.

2. Availability of the basic psychiatric aid.

The psychiatric aid must preserve dignity of the patient, it must be materially accessible, just, be at an accessible distance from the patient's place of living, as well as be given on the voluntary basis.

3. Assessment of the mental health in compliance with the generally accepted international principles.д

4. Provision of the psychiatric aid in the least restrictive form.

If it is necessary to use various measures of restriction, one should periodically revise this decision (e.g., every 30 minutes in case of a physical restriction and not more than 4 hours).

5. Self-determination, i.e. receiving of the patient's consent before using any type of interference.

6. The right to receive help in self-determination.

7. Availability of the reassessment procedure.

The decision must satisfy all the legal rules in force at this particular moment. The laws must be open, easily understood and in a clear form. The patient should be informed about his rights. The control over the actual application of the Law on Mental Health must be exercised by a body which does not depend upon the health care authorities.

8. Mechanism of automatic periodic review.

9. Qualification of the people taking a decision.

The people who take a decision concerning the patient must be:

a. competent;
b. informed;
c. independent;
d. impassive.

Ideally, the body taking a decision should consist of at least 3 persons.

10. Respect of law.

The decision must satisfy all the legal rules in force at this particular moment. The laws must be open, easily understood and in a clear form. The patient should be informed about his rights. The control over the actual application of the Law on Mental Health must be exercised by a body which does not depend upon the health care authorities.

Psychiatric treatment organization are divided into 3 main groups: outpatient, inpatient and social rehabilitationщ. Outpatient care is mentally ill in psychiatric (neuropsychiatric) dispensaries. Psychiatric clinics serve 9municipal and regional residents. In addition, at district health centers, district hospitals (in places where there areщ щпо clinics) organized psychiatric treatments.

Indications for hospitalization in a psychiatric hospital.

1. The presence of severe mental illness, which can not be treated on an outpatient basis

2. The necessity for permanent dynamic medical supervision for the differential diagnosis and diagnostics.

3. Indications for emergency hospitalization (without the patient's consent) will be regulated by the law on psychiatric care.

Finally, the issue of psychiatric hospitalization only solves a psychiatrist after a personal examination of the patient. If you have doubts about the mental health of the patient's doctor of any specialty is obliged to advise the patient consultation psychiatrist, if there are indications for immediate hospitalization organize challenge teams of specialized mental health care.

Specificity of the organization of psychiatric hospitals. The optimal location of the place of psychiatric hospitals should be considered as a green area, distant from saturated transport routes and industrial plants. It is essential that the hospital area was planted, each department should be allocated places for walking patients (exercise yards).

Departments of psychiatric hospitals is differentiated by gender (male and female) and age (children, teenagers, gerontology) principles. In addition, there are specialized departments: for neurotic patients, forensic psychiatric examination, tuberculosis, infectious disease, emergency department, department for emergency treatment.

In psychiatric hospital also work therapists, dentists, neurologists, gynecologists, surgeons, ophthalmologists, otolaryngologists. Organized diagnostic services: radiological, electrophysiological, laboratory (clinical and biochemical studies), as well as the psychological laboratory. The work organized by administrative – economic staff.

The organization of psychiatric department has a such features. It is necessary to exclude the possibility of leaving the department by patients with aggressive and auto-aggressive tendencies. This explains the specific of closed doors. Every psychiatric department is divided into 2 types of parts: the sanatorium and observation. Children's department of mixed gender. In such department organized classrooms, where children learn, play. Department of neuroses do not a lot of differents from typical neurological departments.

In the departments of forensic psychiatry more stricter regime, than in psychiatric, it is provide by the halp of police.

Since 1975, in our country Narcologikal Service is a separate unit. For outpatient, treatment is provided in narcological dispensary and district narcologikal departments and for inpatient – in narcological hospitals.

METHODS OF EXAMINATION FOR MENTAL PATIENTS

The main method in examination of mental patients is the clinical-psychopathological one, which is based on a conversation with a patient, observation of his expression and behaviour.

The first acquaintance of the physician with the patient and establishment of an adequate psychological contact between them are of paramount importance. During the conversation the physician is also a subject of study from the patient’s side. Mental patients, and patients in general, are very sensitive to manifestations of inattention, rudeness, tactlessness, superiority, falsity, they finely respond to kindness, sympathy, a merciful attitude to themselves from the side of the physician and medical staff.

In case of an inadequate emotional contact of the physician with the patient the latter develops watchfulness, distrust, a wish to hide his feelings with a resultant incorrect interpretation of the diagnostic value of the signs of mental and somatic disorders. Often the patients whose attitude to their state is not critical dissimulate, i.e. deliberately hide their mental disorders.

The physician should be able to listen to the patient, giving him an opportunity to tell about himself as independently as possible. Nevertheless, the conversation can be directed; the physician should skillfully ask questions trying not to induce the patients with them, more frequently ask to describe some or other symptoms with more details rather than to confine himself only to statement of the terms used by the patients, as they often put their own meaning to known terminological designations instead of the generally accepted one. Therefore the physician should ask the patient, "What is it?", "Describe with more details what really you feel."

The physician should put questions in the form understandable for the patient, use only the terms that the patient knows or, if something is not clear for the patient, patiently explain, be an active participant in the dialogue, listen to the patient attentively, not to be distracted for outside matters in the patient's presence. The physician must not emotionally respond to any absurdities heard from the mental patient or seen in his behaviour. In the end of the conversation it is necessary to tell the patient your preliminary opinion about his state in a delicate form.

The scheme of a case report

1. Passport data (information)
2. The patient's complaints
3. The life history (according to the patient)
4. The case history (according to the patient)
5. The objective history (according to the people who know the patient)
6. The patient's state at the moment of examination:
   a) somatic;
   b) neurological;
   c) mental.
7. Conclusions on the basis of the primary examination, the initial syndromological diagnosis.
8. Data of the follow-up and examination of the patient.
9. Differential diagnosis.
10. Making of the final diagnosis.
11. Administration of the treatment.
12. Making of the prognosis and social-labour recommendations.

Laboratory examinations:

a) clinical analyses of the blood, urine, liquor, etc.;
b) X-ray examinations;
c) electrocardiography, electroencephalography, rheoencephalography;
d) experimental-pathological ones.

A conclusion made on the materials of the primary examination: determination of the psychopathological syndrome, making of the initial diagnosis, administration of urgent medical measures.

Data of the subsequent observation and examination of the patient (laboratory examinations, results of examinations made by other specialists, records from diaries of everyday observation of the patients, etc.).

Making of the differential diagnosis, making of the final nosological and syndromological diagnosis and administration of the treatment.

In order to reveal and specify disorders of mental processes, an experimental-psychological examination is made. The methods of the experimental-psychological examination were studied in the course of the fundamentals of general psychology and medical psychology.

The investigation of attention, fatiguability and memorization is carried on using the proof-reading test, Crepelin's count, counting, finding numbers in Schulte's tables, learning 10 words by heart.

Peculiarities of thinking and intellect are investigated with help of the following tests: repetition of stories, explanation of subjects of pictures, classification of objects, definition of concepts, explanation of the figurative meaning of proverbs and sayings, Wechsler's test.

Peculiarities of personality are assessed using the Minnesota Multitype Personality Inventory (MMPI), Schmyschek's Inventory, Pathocharacterological Inventory.

The factors traumatizing the psyche and morbid feelings can be revealed by the method of unfinished sentences, with help of the topical aperceptive test (TAT). Luscher's colour test and Taylor's alarm scale help in revealing latent depression.

The medical psychologist gives interpretation of the study results which are only auxiliary material for the physician.

In diagnosing exogenous-organic psychoses, neurophysiological (electroencephalography – EEG, rheoencephalography – REG, echoencephalography – Echo-EG), as well as neurovisualizing (X-ray examination of the skull, computed tomography of the brain) methods of examination are used. For diagnosis and therapy of many mental diseases, analyses of blood, urine and cerebrospinal fluid are used.

Studies of brain structure. ***Computed tomography (CT)*** is increasingly being used for diagnosis in recent years. They helps to diagnose large tumors, cysts, destruction, to determine the size of the ventricles, hydrocephalus, cerebral cortex. Small tumors can not be detected if by CT.

Magnetic resonance imaging (MRI) makes it possible to analyze without special staining brain structure in different modes with high quality.

Positron emission tomography (PET) allows you to explore not only the structure but also the peculiarities of the different parts of the brain, and with great quality. The method is based on a study of the distribution of natural brain metabolites (glucose, neurotransmitters, drugs and other substances), labeled with specific short-lived radioisotopes, and requires a special laboratory for the production of these isotopes, so now it is used for research purposes only.

The bones of the skull does not allow us to study the structure of the brain using ultrasound, but ultrasound clinic utilizes a method that determines the position of median brain structures (M-echo). In a normal shift of midline structures is less than 2 mm from the center. Volumetric processes (tumors, cysts, abscesses) cause M-echo shift in the direction opposite lesions.

Psychological methods. There is a huge amount of experimental psychological techniques used in various fields of psychology. The most common psychological analysis was performed to assess the extent and nature of memory disorders and intelligence, identifying pathological characteristics of the patient thinking, personality characteristics.

For the diagnosis of organic brain lesions, the degree of mental retardation using a technique of studying memory, attention and intelligence. In most cases used such characteristic, as the IQ endex to determine intelligence.

Raven's Matrices, using non-verbal character sets and figures, in the location where the person has to detect patterns. The test has small connection with the education of the person. Previous training is also can masked the results.

In clinical practice, physicians often use simplified test problem about estimating the degree of disorder of memory and intelligence. In particular, the sample is used to memorize 10 words (normally stored after the test 3–4 verbal repetitions) or meaningless phrases (memorized after 5–7 reps). Countig by Kraepelin involves subtracting from 100 or 200 of the same number (7 or 17). Violations occur when a memory disorders, as well as the weakening of the intellect. The deterioration of the results, as evidenced by the task about exhaustion. the classification of the objectives of the division of a large number of objects in less than the number of groups. In violation of the capacity for abstraction turns out a large number of small groups. On the damage and intelligence indicating specific interpretation of the content of proverbs and sayings.

Of great importance are methods for estimating harmony and focus thinking in diseases such as schizophrenia, epilepsy and others. Some abnormalities may be detected already when using the samples described above on memory and intelligence. In particular, patients with schizophrenia are often used during the classification unimportant, minor signs. This is particularly evident in the application of methodology "fourth extra" (the subjects were asked to make a group of 3 pieces and explain what 4th object is not included in it). When interpretation of metaphorical meaning of proverbs and sayings with schizophrenia often use non-standard abstract symbolic explanation. Patients with epilepsy usually, on the contrary, there are simple, close to the everyday explanations with greater attention to detail. At times, patients simply can not exclude any subject ("What superfluous So nothing is too much is not: after all, a chair, and a table and a bed, and a cup – all you need As without them can not be ?!?!").

Pictograms Method (LS Vygotsky) is trying to memorize 10–15 words and abstract concepts with the help of their image in the picture without the use of letters. Subjects are chosen in ascending order of the degree of abstraction, such a happy holiday, hard work, illness, happiness, love, development, deceit, heroism, hatred, justice, friendship, and others. The relationship that the patient explains, between drawing and depicts the concept. Identify the level of abstraction, naturopathic associations, support to secondary symptoms, emotional attitude to the portrayed subject's concept.

Personality questionnaires suggest multiple choice answers to a number of questions. The subject in this case may deliberately distort the results, simulating the pathology or hiding the existing negative personality traits. Therefore, an important requirement to create tests – the presence of special evaluation scales that exhibit conscious attitude. Influence of the installation of the test the more than obvious purpose of the study, so monothematic questionnaires are considered less reliable (eg, range of reactive and personal anxiety Spielberg). The most commonly used clinical psychologist Eysenck questionnaire, MMPI.

Eysenck test is based on the individual characteristics of the parameters "extraversion-introversion" and the severity of the factor "neuroticism", it consists of 57 questions (24 for each factor and 9 issues of "lie" scale). Each question allows only two possible answers: "Yes" and "No". It is assumed that there are introverts dysthymic symptoms extroverts – hysterical and psychopathic, the degree of manifestation of neuroticism points to the severity of the suffering (neurosis). In patients with schizophrenia, neuroticism lowest level in depressed patients – high. With age, the severity of neuroticism and extraversion decreases. The test is not considered ideal because of the significant impact on the result of the intellectual level of the subject, the proposed scale of lies is imperfect and does not rule out such an effect.

Test MMPI (Minnesota Multiphasic Personality Inventory) in the original version contains 550 statements and suggests an answer in the form of assessments 'true' or 'false'. The result is an estimate of 8 clinical parameters (hypochondriasis, depression, hysteria, psychopathic, paranoid psychasthenia, schizophrenia, hypomania), 2 psychological characteristics (masculinity-femininity and social introversion) and 3 rating scales (false, reliability, correction).

Projective techniques allow us to investigate the identity of the most free, untrammeled imagination and activity of the patient's what some pre-prepared answers. Pictures and questions in these tests differ incompleteness and uncertainty, which allows you to explore the deep, often unwitting psychological processes. Because these techniques do not suggest answers are ready, possible a greater range of reactions, more "subjective". In this sense, talk to your doctor, who asks the question in the infinitive form, which does not contain the answers foreseen, is endowed with a maximum degree of projective and can provide a wealth of material for the analysis of the patient's personality. The main problems of the use of projective techniques is the difficulty of unambiguous interpretation of the results of different investigators and the complexity of their standardization.

In the method the patient is invited to Rorschach associations that arise from it when looking at the 10 tables with symmetrical polychrome and monochrome images (spots). A detailed formal list of the most common responses. A large number of vivid associations, the perception of motion show high intelligence and activity, attention to detail – about the disorganization of thought (for example, mental illness), related to the colors – an emotional experience, the presence of repetition – a sign of passivity, perseverative thinking.

Thematic Apperception Test (TAT) is based on the stories, compiled by the subject when looking at the cards, which depict people and objects in uncertain proportions and conditions. In total there are 30 cards with pictures and one without images intended for their own fantasies of the subject. Allowed presentation directed questions. Dear, the test shows the basic aspirations, needs, existing conflicts and ways of resolving them.

The test Rosenzweig uses 24 figures, images which require more specific and explicit limitation subject of interest (frustration) – thus possible to evaluate human behavior under stress.

Luscher test does not use any images of anything, but only the human tendency to interpret certain colors. In a simplified version of a technique using a set of 8 colors (gray, blue, green, red, yellow, purple, brown, black). Application projective techniques in clinical practice is limited due to their complexity or (Rorschach, TAT) or an insufficient degree of validity (Lusher test).

The main provisions of the ICD-10

International Classification of Diseases (ICD) developed by the World Health Organization (WHO) in order to unify the diagnostic approach in statistical, scientific and social research. Section of mental illness is entered in the International Classification after the Second World War, the development of its 6 th revision. Currently, there are 10 th revision – ICD-10 (ICD-10), where mental disorders and behavioral disorders account for chapter V (F).

CLASSIFICATION OF MENTAL AND BEHAVIORAL DISORDERS

F0 Organic, including symptomatic, mental disorders
F00 Dementia in Alzheimer's disease
F01 Vascular dementia
F02 Dementia in the diseases qualified in other sections (in Pick's, Creutzfeldt-Jacob, Gentington's, Parkinson's diseases caused by the human immunodeficiency virus (HIV)
F04 Organic amnestic syndrome, not caused by alcohol or other psychoactive substances
F05 Delirium, not caused by alcohol or other psychoactive substances
F06 Other mental disorders resulting from an injury or dysfunction of the brain, or caused by a physical disease (hallucinosis, catatonic disturbance, delirious disturbance, affective disturbances, anxious disturbance, dissociative disturbances, asthenic disturbances)
F07 Disorders of the personality and behaviour caused by a disease, injury and dysfunction of the brain
F1 Psychic and behavioural disorders caused by taking of psychoactive substances (alcohol, opioids, cannabioids, sedative or soporific substances, cocaine, other stimulants, including caffeine, hallucinogens, tobacco, volatile solvents)
F2 Schizophrenia, schizotypical and delirious disorders
F20 Schizophrenia (paranoid, hebephrenic, catatonic, postschizophrenic depression, residual, simple)
F21 Schizotypical disorder
F23 Acute and transitory delirious disorders
F24 Induced delirious disorder
F25 Schizoaffective disorders
F3 Affective disorders of mood
F30 Maniacal episode
F31 Bipolar affective disorder
F32 Depressive episode
F33 Recurrent depressive derangement
F34 Chronic (affective) disorders of mood (cyclothymia, dysthymia)
F4 Neurotic, stress-related and somatoformic disorders
F40 Anxious-phobic disorders (agoraphobia, social phobiae, specific [isolated] phobiae)
F41 Other anxious disorders (episodic paroxysmal anxiety, generalized anxious disorder, mixed anxious and depressive disorder)
F42 Obsessive-compulsive disorder (annoying thoughts, obsessive rituals)
F43 Response to severe stress and disorders of adaptation (acute response to stress, posttraumatic stress disorder, disorders of adaptation)
F44 Dissociative (conversive) disorders (amnesia, fugue, stupor, trances and states of seizures, disorders of motility, spasms, anaesthesia, Ganser's syndrome, disorders of the multiple personality)
F45 Somatoformic disorders (somatized disorder, undifferentiated somatoformic, hypochondriac disorder, somatoformic vegetative dysfunction of the heart and cardiovascular system, gastrointestinal tract, respiratory system, urogenital system, chronic somatoformic pain disorder)
F48 Other neurotic disorders (neurasthenia, the syndrome of depersonalization and derealization, etc.)
F5 Behavioural syndromes connected with physiological disorders and physical factors

F50 Disorders in food taking (anorexia nervosa, bulimia nervosa, vomiting combined with other psychological disturbances)
F51 Sleep disorders of inorganic nature (insomnia, hypersomnia, failure to keep to the sleep-wakefulness regimen, sleep walking – somnambulism, horrors during sleep, nightmares)
F52 Sexual dysfunction not caused by any organic disorder or disease (sexual anhedonia, disturbed orgasm, premature ejaculation, vaginismus, dyspareunia)
F53 Mental and behavioural disorders connected with childbirth and puerperal period
F55 Abuse of substances which do not cause addiction (antidepressants, purgatives, analgetics, antacids, vitamins, steroids and hormones, specific herbs and folk medicine means, etc.)
F6 Disorders of mature personality and behaviour in adults (paranoid, schizoid, dissocial, emotionally unstable, hysteric, anancastic, anxious, dependent, etc.)
F62 Chronic personality changes not connected with any injury or disease of the brain (after suffering an accident, after a mental disease, etc.)
F63 Disorders in habits and drives (pathological disposition to games of chance, pyromania, kleptomania, trichotillomania, etc.)
F64 Disorders in sex identification (transsexualism, transvestism of the double role, etc.)
F65 Disorders in sex preference (fetishism, fetishistic transvestism, exhibitionism, voyeurism, pedophilia, sadomasochism, multiple sex preference disorders, etc.
F66 Psychological and behavioural disorders connected with sexual development and orientation (disturbance of sexual maturation, egodystonic sexual orientation by sex, disturbance of sex relations, etc.)
F68 Other disorders of mature personality and behaviour in adults (exaggeration of physical symptoms for psychological reasons, deliberate causing or simulation of somatic or psychic symptoms or disability – simulatory disorder)
F8 Disorders in psychological development
F80 Specific disturbance of speech development (articulation, expressive speech, receptive speech, aphasia)
F81 Specific disorders in the development of school skills (reading, spelling, counting)
F82 Specific disorder in the development of motor functions
F83 General developmental defects (infantile autism, atypical autism, Rett's syndrome, hyperactive disturbance, Asperger's syndrome)
F9 Behavioural and emotional disorders that usually develop in children and juveniles
F90 Hyperkinetic disturbances (disturbance of attention activity, hyperkinetic behavioural disorder)
F91 Behavioural disorders (limited by family conditions, unsocialized, socialized, oppositionally provocative, depressive)
F93 Emotional disorders specific for childhood (anxious disturbance owing to parting, phobic, social anxious disturbance, disturbance of sibling rivalry, etc.)
F94 Disorders of social functioning with the beginning specific for childhood (elective mutism, reactive disturbance of attachment in childhood, disinhibited disturbance of attachment in childhood, etc.)
F95 Tic disorders
F98 Other behavioural and emotional disorders which usually develop in children and juveniles (inorganic enuresis, inorganic encopresis, digestive disturbance in infancy, eating of the inedible in infancy and childhood, stereotyped dyskinesiae, stammering, breathless speech, etc.)

The concepts of the registers of mental disorders

Non-psychotic register of syndromes is mainly characterized by impairment in the emotional and motor-volitional sphere with the fact of criticism (understending) of the disease.

Psychotic register of syndromes are characterized by following symptoms: hallucinations, delusions, disorders of consciousness in the absence of a criticism (understending) the disease.

Syndromes of defect-organical register characterized by cognitive impairment (memory disorders, attention, thinking and intelligence), with a partial fact of a criticism (understending) the disease.

DISTURBANCES OF SENSATIONS AND PERCEPTIONS

Sensations and perception are the initial stage in the cognitive activity of man, the sensual cognition of the surrounding reality.

Sensation is the primary psychic act, a mental process of reflection of separate properties and qualities of objects or events in the human consciousness, these objects or events producing a direct effect on the sense organs.

The reflection of the outer world is not limited by sensations, but is manifested in a more complex process – the process of perception.

Perception is a mental process of reflection of objects or events in the totality of their properties in the human consciousness, these objects or events producing a direct effect on the sense organs. This is a synthesis of a complex of available sensations and representations, rather than a mechanical unification of all sensations.

Representation is a trace of a former sensation or a former perception. This is an imagery recollection, a mental (subjective) image of the reality which appears in the human consciousness in the absence of the corresponding object or event that produced an effect on the sense organs before.

Representations are particularly important in children and juveniles. Representations are the main component of the children's imagination, the basis of creation, children's fantasies. Children at the age of 3–7 years have an extreme brightness and picturesqueness of visual representations; therefore it is difficult for a child to distinguish the images of representations from those of a direct perception. This ability to reproduce bright representations is termed eidetism.

Eidetism is a physiological phenomenon. It is peculiar to artists (visual), musicians (auditory).

Imagination is creation of new images on the basis of the existing representations. It is a sensual (imagery) basis for abstract (conceptual) thinking. In the act of imagination there is formation of not only new images, but later, in juveniles, of new ideas.

In order to better understand disturbances in the processes of sensation and perception it is necessary to know what distinguishes perception from representation, what properties the perception has. They are as follows:

1. Perception possesses a sensual verve.
2. Perception possesses extraprojection.
3. Perception does not possess any arbitrary changeability.
4. Perception possesses the sense of reality.
5. Perception possesses non-belonging to "me".

The representation has the following properties:

1. It does not have any sensual verve.
2. It is projected in the inner world of a human being.
3. It can be arbitrarily changed.
4. It does not possess the sense of reality.
5. It belongs to the subject.

Classification of disturbances of sensations and perceptions

I. Hypoesthesia and anesthesia
II. Hyperesthesia
III. Paraesthesiae, synaesthesiae, senesthopathies
IV. Psychosensory disorders
    1. Visual psychosensory disorders:
        a) micropsiae
        b) macropsiae
        c) dysmorphopsiae
    2. Intero-and proprioreceptive disturbances:
        an improper body scheme
V. Illusions

1. By analyzers: visual, auditory, olfactory, gustatory, tactile, of general feeling (visceral and proprioreceptive).

2. By the mechanism of appearance:
   a) physical
   b) physiological
   c) psychic (affective, verbal, pareudolic)

VI. Hallucinations

1. By analyzers: visual, auditory, olfactory, gustatory, tactile, of general feeling (visceral and proprioreceptive).

2. By complexity: simple (photopsiae, acoasm), compound (having some contents).

3. By the completeness of development: complete (true) and incomplete (false, pseudohallucinations, hallucinoids).

4. By the attitude to the patient's personality: neutral, commenting, imperative.

5. Particular kinds of hallucinations: hypnagogic, hypnopompic, extracampic, reflex, functional.

Hypoesthesia is a decrease of the subjective vividness and intensity of sensations and perceptions; it is manifested in such subjects through their loss of sensual verve, vividness and concreteness up to appearance of the feeling of their alienation (it is in the structure of the syndrome of depersonalization and derealization). For example, a patient with schizophrenia could look at the bright sun with unprotected eyes.

Anesthesia is disengagement of sensations and perceptions owing to disturbances along the projection system or a lesion of the cortical nucleus of an analyzer (optic, auditory, tactile and other anesthesia). It is observed in hysteria.

Hyperesthesia is intensification, increase of sensations of previously neutral stimuli, accompanied by hyperpathic emotional coloring. The stimuli are perceived as excessively bright or loud. The usual light dazzles, the sound of voice deafens, a touch is perceived as painful.

Synaesthesiae are intensification of receptivity of stimuli with radiation of sensations and perceptions to another analyzer; as a result, they acquire some colorings unusual for them, a character of dual sensation. That is, a sound stimulus gives rise to visual sensations, e.g., a color (colored music), an olfactory stimulus excites visual, coloured sensations (roses smell blue), a sound stimulus causes painful sensations.

Hyperesthesia and synaesthesiae develop in the state of intoxication with hallucinogens.

Senesthopathies are various, extremely unpleasant, painful and unusual sensations originating from some internal organs and different areas of the body and having no causes for their origination in this particular organ. These are vague sensations in the form of burning, swelling, bursting open, pouring, twisting, pain in different parts of the body or in the organs where there is no pathological process (inflammation, degeneration, etc.). Senesthopathies may be localized or migrating, isolated or multiple. Typical for schizophrenia are senesthopathies which are fanciful, "florid" in character. For example, a patient complains of "a sensation of fear in the frontal area", a sensation of the lungs "sticking together".

Metamorphopsiae (visual psychosensory disorders) are a distorted perception of really existing objects with preservation of understanding of their meaning and essence, as well as a critical attitude of the patient to them (*dysmorphopsiae* are a distortion of the form of objects, *macropsiae* mean enlargement of objects, *micropsiae* are reduction of their size). Spatial relations are disturbed, there are changes in the time sense, assessment of distances, etc. Psychosensory *intero- and proprioreceptive disorders* mean distortions or disturbances of perception of the corporal "ego", they are manifested in the sense of changes in the proportions and dimensions of the body, its parts. Usually they are in the structure of such syndromes as depersonalization, an improper body scheme, dysmorphophobia and the hypochondriac one. Examples: "the head is enormous", the arms are too long, the teeth are loose.

Illusions are a distorted perception of a really existing object with a change of its contents, meaning.

Depending upon a disturbance in the activity of some or another analyzer, there are auditory (a distorted perception of the meaning of the real speech, hearing of voices in some noise, etc.), visual and other illusions. For instance, in the noise of a wind the patient hears voices: "we will kill you". Instead of the cactus, the boy sees a porcupine on the window-sill.

Illusions of the general feeling (intero- and proprioreceptive) include sensations of compressing, pressing, spasm, tension, pulsation in the internal organs and other parts of the body, i.e. those various and peculiar sensations which can ground on real stimulations of corresponding receptors too.

By the mechanism of appearance, illusions are subdivided into:

Physical – they appear as a result of peculiarities in physical properties of objects and substances (refraction of objects on the border of two media, mirages).

Physiological – they are connected with physiological peculiarities in the functioning of analyzers (e.g., the sensation of movement after the train stops; the horizon, where the land meets the sky; parallel lines at a distance are perceived as meeting together, etc.). They are caused by imperfection of the sense organs.

Illusions can be caused by the fact that attention is concentrated on one stimulus, therefore others may be perceived in a distorted way. Jaspers called these illusions as "illusions of inattention".

Psychic illusions are connected with a change in the mental activity. They are: affective, verbal and pareudolic.

Strong emotions, fear, expectation, stress give birth to *affective* illusions. Their appearance is facilitated by difficult conditions for perception (bad illumination, audibility). Audible *verbal*, or *interpretative*, illusions develop when in different sounds (the noise of a wind, squeak, gritting of wheels of a train, etc.) or talks of the surrounding people the patient hears reproofs, orders at his address. These illusions are often accompanied by delusion of reference. *Pareudolic* illusions appear owing to a disturbance of consciousness (in intoxication, hyperthermia, taking of hallucinogens). In pictures of wallpaper, shadows of objects the patient with pareudolic illusions sees whimsical, fantastic monsters, dreadful images. Pareudoliae are compound sensual, imagery illusions. What was read and seen before acquires excessive strength and is superimposed on the real image which does not correspond by its contents. For example: in a verse "The Forest Vampire" by Goethe a sick boy in a feverish state perceives the surrounding wood and sky as frightening, branches of the trees were seen as stretched pawns of a wood vampire.

Hallucinations are an imaginary perception without any real stimulus (image, phenomenon) at this time. For instance, the patient states that he sees a devil "making faces, dancing" before him and is excessively surprised that the physician does not respond to the devil and says that "he is not here".

According to the phase-inhibition theory by Ye.A. Popov, hallucinations are pathomorphologically based on the equalizing and paradoxical phases of an incomplete protective inhibition.

Visual hallucinations are an imaginary perception of visual images without any real stimulus (image, phenomenon) at this time. For example, the patient states that he sees snakes crawling under the bed. As a rule, visual hallucinations reflect acute states, while auditory (verbal) and tactile hallucinations reflect chronic ones. Visual hallucinations are more typical for the exogenous-organic pathology.

Auditory hallucinations: the patient hears calls, talks, music, singing, etc., which do not exist at this moment. *Verbal hallucinations* in the form of a human speech are particularly distinguished. *With respect to the patient's personality*, they can be neutral, commenting (hostile, threatening, benevolent, antagonistic – some voices are kind, others are malicious), imperative, i.e. ordering the patient to do something.

Imperative hallucinations represent a grave danger for the patient himself and surrounding people because "the voices" may order to kill somebody, set a flat on fire, throw out valuable things, etc.

Olfactory hallucinations: the patient perceives some smells which are absent at present. They may be pleasant, but oftener they are foul, e.g., strong smells of burning, petrol, "the smell of flatus". Strong smells are observed in the olfactory aura in epileptics.

Gustatory hallucinations are manifested by the fact that the patient perceives some gustatory stimuli which do not exist at this moment; often it is a smack of a poison, "bane" (mercury, lead, strychnine).

Tactile hallucinations: temperature ones, a perception of some moisture on the body, in the form of touches, compression, strokes, pinches, thrashes, stretching of the skin, etc.

Visceral hallucinations *(senesthopathic hallucinosis)*: there is a perception of an object or image in some organ or part of the body. For example, the patient saw that "some snake crawled into my mouth and settled in my oesophagus".

Simple hallucinations (photopsiae, acoasm) do not have any contents. They are perceived in calls, light effects, luminous points, etc.

Compound hallucinations have some contents, may be in the form of images, scenes, panoramas, dialogues, talks, smells, touches, etc.

True, complete hallucinations are those ones that possess all the properties of perception, namely sensual verve, extraprojection, absence of an arbitrary changeability with a resultant sense of reality. For instance, the patient saw a witch. He vividly and lively described details in the appearance of the "witch", her deathly pale body, "claws" (it was the reason to regard this image as a witch). She sat at the room, made faces, scared, but he could not do anything, the witch was real, "true". This patient suffered from a complete, true hallucination.

Incomplete hallucinations *(pseudohallucinations)* are those ones that do not have some of the properties of perception. If there is no extraprojection, then it is a pseudohallucination, described by V.Kh. Kandinsky and manifested in the fact that the patient hears inside his head some voices, sounds, etc., or sees with "his inner eye" "some little fellows on the gyri" or other images. Pseudohallucinations lose such a property of perception as the sense of reality and differ from real stimuli.

Particular kinds of hallucinations

Hypnagogic are the hallucinations which appear during a transition from wakefulness to sleep (when falling asleep). These hallucinations develop with closed eyes, they may be isolated or multiple, scene-like or kaleidoscopic.

Significantly less frequent are hypnopompic hallucinations which appear when waking up, i.e. during a transition from sleep to wakefulness.

These hallucinations disappear when the patient falls asleep or wakes up completely.

Extracampic are the hallucinations localized outside the visual field. For instance, a patient looking straight forward "sees" a devil behind him.

Functional hallucinations: a hallucinatory stimulus is perceived side by side, simultaneously with a real one. An example: in the noise of water one also hears the noise of water and "voices". The difference between illusions and functional hallucinations lies in the fact that in illusions, instead of some stimulus, there is perception of another one by contents (not the noise of water when a tap is turned on, but a whisper speech), while in functional hallucinations, as it was said before, both the noise of water (real) and a hallucinatory speech in it are perceived.

Reflex hallucinations: these are reflected when a real stimulus (e.g., a turn of a key in a lock) is hallucinatorily perceived in another place (a turn of a key in the heart). Or, for instance, a spindle in a hand is perceived as a spindle spinning and buzzing in the heart.

Suggested hallucinations are called forth during a session of hypnotherapy.

Negative hallucinations: absence of perception of really existing objects.

Episodical hallucinations: they appear periodically, e.g., ecstatic ones in epileptics.

Hallucinations of Charley Bonnet's type: mentally healthy people who lost their sight or hearing develop visual or auditory hallucinations (with a critical assessment). For example: a female patient (who had become blind) saw "a blonde girl in a beautiful blue dress going along a fence painted green".

Phantom phenomena in people with amputations: they are hallucinations in mentally healthy subjects (with a critical attitude to them), when a person perceives presence of an amputated extremity, may feel a pain in it, etc.

Children and juveniles most frequently have visual hallucinations (animals, monsters from the tales they have read, etc.), auditory ones being in the form of simple or elementary hallucinations (ringing, noises, shots, calls by name, etc.).

Hallucinations are revealed in a conversation with the patient, questioning him, observing his behaviour, facial expression, etc. Patients with auditory hallucinations would lend their ears to something, talk with "voices". In case of visual hallucinations, patients would look attentively to something; patients with tactile hallucinations would whisk off something from themselves, etc.

In patients with delirium tremens, it is possible to call forth hallucinations (if they disappeared) or cause their intensification (if they are present) with help of a slight pressing on the eyeballs (Liepman's symptom). The physician may show a patient a clean sheet of paper and suggest to read a text written there (suggested hallucinations), and the patient will read a non-existent hallucinatory text (Rieger-Reichardt symptom). Auditory hallucinations intensify or appear in acute or chronic alcoholic hallucinosis after the physician suggests the patient to listen attentively to a monotonous sound of a metronome, clock (Bekhterev's symptom). It is possible to suggest a patient to speak on the telephone whose receiver is disconnected from the set, and the patient will "hear" a voice in the receiver (Aschaffenburg's symptom).

THE SYNDROMES ON THE TOPIC OF "DISTURBANCES OF SENSATIONS AND PERCEPTION" SEE CLASS № 3.

Control questions:

1. Describe the structure of mental health care.

2. List the indications for hospitalization in a psychiatric hospital.

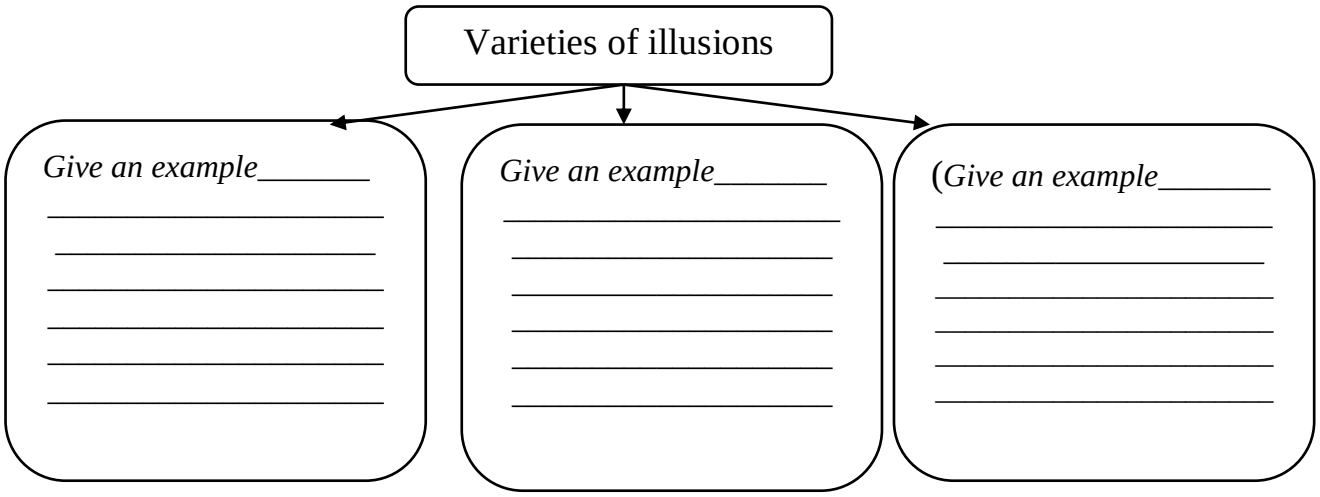
3. Describe the basic method of examination of mental patients.

4. Give the characteristic of psychotic, non-psychotic and defect-organic syndrome?

5. Give the definitions of hyperesthesia, hypoesthesia, anesthesia, senestopathia:

6. Give the definition of psychosensory disorders:

7. Fill the empty cells:



8. Fill the table

The distinctive features of true hallucinations from pseudohallucinations	
True hallucinations	**Pseudohallucinations**

9. Particular kinds of hallucinations. *Give definitions:*

Hypnagogic are the hallucinations, which appear _____

_____

Hypnopompic hallucinations, which appear _____

_____

Extracampine are the hallucinations _____

_____

Functional hallucinations _____

_____

Reflex hallucinations_____

_____

Suggested hallucinations _____

_____

Negative hallucinations _____

_____

Episodical hallucinations _____

_____

Hallucinations of Charley Bonnet's type _____

_____

Tests

1. Who is the first identified 4 types of temperaments and connected them with a predominance in the body of one of the 4 main juices of a living organism (blood, phlegm, yellow bile and black)?

A. Pinel
B. Freud
C. Hippocrates
D. Esquirol
E. Kraepelin

2. Who is the first fined the name "schizophrenia" for the disease, described by Kraepelin?
A. Kandinsky
B. Freud
C. Hippocrates
D. Protopopov
E. Bleuler

3. Finally, the issue of hospitalization in a psychiatric hospital decides:
A. Patient's colleagues
B. Patient's relatives
C. Family doctor
D. Doctor – psychiatrist
E. Policemen

4. In the emergency department of a psychiatric hospital comes a 30 years old man, he said that " aliens introduced in his spine the sensors that govern his actions, thoughts ...". Man is brightly gesturing, looks bad condition, speaks with a loud voice, he thinks that he is mental healthy. Determine the register of this mental disorders.
A. Non-psychotic
B. Psychotic
C. Psychopatic
D. Mental healthy
E. Defect-organical

5. 25 year-old woman went to the doctor with the complains of anxiety, depressed mood, increased irritability which came after the sudden tragic death of her parents. Determine the register of this mental disorders:
A. Non-psychotic
B. Psychotic
C. Psychopatic
D. Mental healthy
E. Defect-organical

6. A 23 years-old patient said that she hears «a voice of God from the backbone». What disorder of perception does she have?
A. True hallucinations
B. Pseudohallucination
C. Illusion
D. Psychosensoric disorder
E. Senestopathy

7. The child aged 6 is afraid of the dark. In the evening when falling asleep he saw “an animal” in the room, but when he wakes up, he understood that it was an armchair. What disorder of perception did the child have?
A. Illusion
B. Hallucinations
C. Psychosensoric disorder
D. Hyperesthesia
E. Synesthesia

8. A 30 y.o. man was always reserved by nature. He never consulted psychiatrists. He complains of headache, sensation "as if something bursts, moves, bubbles under his skin". Objectively: no pathology was revealed. What is the most probable psychopathologic symptom in this case?
A. Senestopathy
B. Paresthesia
C. Hallucination
D. Hypersthesia
E. Dysmorphopsia

Tasks

1. A 78 years old patient vas taken by ambulance from the street. He cannot tell his passport data, does not know the date and place of his location. He is emotionally adequate, quiet, answer to the questions, he is worry, that he cannot recall the home address. Who can decide what to do with the patient. What kind of documents they need to use for help to this patient? Determine register of this mental disorder.

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2. The mother says, that her 6-year-old child has mental development retardation of the children of his age: late began to speak and walk, can't read, has bad memory to the letters. She asked for help to the local pediatrician. In which institution doctor should send this patient? In what way should examination of the child to be made? What kind of documents they need to use for help to this patient? Determine register of this mental disorder.

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CLASS №2
DISTURBANCES OF THINKING. DISTURBANCES OF INTELLECT. DISTURBANCES OF MEMORY AND ATTENTION. DISTURBANCES OF EMOTIONS AND EFFECTOR-VOLITIONAL SPHERE

DISTURBANCES OF THINKING

Thinking is the higher form of reflection of the objective reality, a process of a generalized and mediated reflection of objects and events of the material world in their natural connections and relations.

In pathological states, there may be a disturbance of the associative process or disappearance of connections between isolated thoughts, it demonstrating a disturbance of thinking by form. In other cases there is a disturbance in the process of formation of conclusions, the logic suffers, there is a disturbance of thinking by contents.

Classification of disturbances of thinking

1. A disturbance in the formation of concepts:
   a) pseudoconcepts
   b) condensation of concepts
   c) neologisms
2. A disturbance in the rate of thinking:
   a) rapidity of thought, “galloping ideas”
   b) retarded thinking
   c) delay, arrest (Sperrung)
   d) mentism
3. A disturbance in the form of thinking:
   a) pathologically circumstantial thinking
   b) philosophizing
   c) non-continuous thinking – schizophasia
   d) incoherent thinking
   e) amorphous thinking
   f) paralogical thinking
   g) autistic thinking
   h) symbolic thinking
   i) verbigerations
   j) perseverations
   k) affective thinking
4. A disturbance in the contents of thinking
   a) fixed ideas
   b) dominant ideas
   c) overvalued ideas
   d) delusion-like fantasies
   e) forced thoughts
   f) delusions

Forms in the formation of delusion:

1. Primary delusion (interpretative).
2. Secondary delusion (sensual, imagery).

The contents of delusions:

a) persecution,
b) influence,
c) reference,
d) pretence,
e) damage,
f) self-condemnation, self-humiliation,

g) negation (nihilism),
h) hypochondria,
i) jealousy,
j) love,
k) invention,
l) reforming,
m) high origin,
n) litigiousness,
o) expansive delusions,
p) induced delusions.

Pseudoconcepts are false concepts formed on the basis of casual, insignificant signs. For example, a female patient asks to give her green and feels hurt that she is not understood.

Condensation of concepts (agglutination) is manifested in a fusion of several concepts which are rather remote from one another. It is observed in schizophrenia and some organic lesions of the brain. For instance: *when a female patient was asked how she felt she answered "shockolately" and explained it in the following way: "after insulin shocks my health is beginning to return to normal".*

Neologisms are new, unusual concepts created by patients.

For example, *complaining of her destiny a female patient says: "It is not life, but apheides and poltoraniae".*

Pseudoconcepts, condensed concepts and neologisms are usually produced by patients with schizophrenia. But one should remember that sometimes neologisms are used as a literary device by writers and poets (Khlebnikov, Mayakovsky).

Rapidity of thought is observed in maniac and hypomaniac states of various origin: in the manic-depressive psychosis, exogenous psychoses, at the initial stage of alcoholic intoxication. Usually rapidity of thought passes against a background of high spirits and increased distraction of attention, it is characterized by a rapid, easier development of associations, most frequently of superficial ones. The mental productivity of such patients is sharply decreased, they are characterized by an easy loss of the object of discourse. A significant rapidity of thought is termed "galloping ideas". In galloping ideas the relation between thoughts is not lost, but the patient can say only some part of them, the speech lags behind the thought, having begun some phrase the patient passes to the second one without completing the first phrase, he skips words, hurries to say another thought, etc.

In case of rapidity of thought often there is a decrease of reasonableness, the sense of tact, confusion, the patients may say to a person's face such things which a healthy person would prefer to keep to himself.

An example of the patient's speech:

"Doctor, I love you ... the love is not a vice, but a considerable swinishness... look at her, there is her grandson's shirt under her gown... Friday from under Saturday... tomorrow will be Saturday and my husband will come... ha-ha... a husband is not a jazz band... ha-ha".

Retarded thinking is observed in asthenic states and the depressive syndrome; it is characterized by a decreased number of ideas accompanied by a subjective sensation of stiff thinking, the feeling of the patient's own intellectual indigence. The thoughts pass slowly, the patients complain that they have "few thoughts", it is possible to observe appearance of the sensation of emptiness in the head. The speech is slow and has scanty words, the patients answer questions in one syllable and after a long pause.

Delay of thinking (Sperrung) is manifested by a sudden arrest in the flow of thoughts. It is observed in patients with schizophrenia and easily revealed in a conversation. The patient would unexpectedly stop talking and then explains his silence by the fact that he had a delay of thoughts, for some time he had a sensation of absence of thoughts. Sperrung can be detected during an experimental-psychological examination when the patient's activity is characterized by stops of various duration explained by the patient as "disappearance of thoughts". Sperrung may last from a few seconds to several days. Sometimes it is accompanied by signs of psychic automatism; in this case the patient explains absence of thoughts as their "taking away". Sperrung does not affect the speed in the course of associative processes, after the delay the thoughts pass again as usual.

Flow of thoughts (mentism) is an obsessional automatic flow of thoughts which is painfully felt by the patient; the thoughts incoherently appear and continuously flow in the consciousness irrespective of the patient's wish. The flow of thoughts is in the structure of Kandinski-Clerambault psychic automatism syndrome. It is observed in schizophrenia, encephalitis, traumatic injuries of the brain, in the state of extreme asthenia, in intoxications with some drug preparations (diphenylhydramine hydrochloride).

Pathologically circumstantial thinking (stiff thinking) is observed in epileptic dementia, at the remote period of epidemic encephalitis, in other organic diseases of the CNS. The disorder is characterized by thoroughness, an increased detailing, an inability to separate the main from the minor, a difficulty in switching over from some subject to another one. The speech includes words-parasites ("you see", "so to say", "so", etc.). Repetitions, pauses, diminutive words and terms of endearment are typical. The patient would deviate from the main subject of the story, then some time later return to it and again turn to side details, his reaction to the questions with which his interlocutor interrupts his speech is little, even if these questions are to help him.

An example of the patient's speech:

Question: "Did a person who got stuck in a bog act correctly when he tried to pull himself out by his hair?"

Answer: "It is difficult to say exactly what hair, probably a dark-haired man, if it was very boggy, would not pull out himself unaided, or maybe nothing more remained for him to do. Let him have a nice time. I regret his hair, if it is good, like in a tale, they would pull and pull, but will they draw out the turnip? But it was difficult too."

Philosophizing means idle futile discourses deprived of a cognitive sense. It is observed in schizophrenia, other diseases. In philosophizing, the patient uses formal casual associations, where the purpose of a task is moved back to a background, while the patient's desire to philosophize is moved forward to a foreground. Philosophizing is particularly striking in those cases where fulfilment of a task requires wordy definitions, wordings, comparison of concepts. In such cases it is possible to observe an increased pretentiousness in contrast with an insignificance of the object of the judgement, commonplace discourses, a pathetic tone of the speech, often against a background of an increase in the self-estimation and level of claims.

In schizophrenia, philosophizing reveals actualization of "weak" signs, disruption of associative processes, destruction of mental stereotypes formed during the life. In patients with epilepsy, philosophizing is of a compensatory character which reflects overestimation of the personality and is manifested by an instructive tone of speech, trite judgements with poor contents, as well as by inertness, a difficulty in distraction from the situation, a narrow range of thinking, egocentric tendencies with a poor stock of words. In oligophrenia at the degree of debility, philosophizing is of a compensatory character too, where loquacity of judgements hides poverty in the contents of speech.

Below is an example of philosophizing.

A patient's treatise on subject "Why there is appearance of love". In the organism of a human being there is appearance of hormones. In a man they are male, in a woman they are female. These hormones are of a protein origin. But when did they originate? In what conditions? Every human being from the very moment of conception has an ability to excitement. Between an excited tissue and an unexcited one appears a biocurrent which externally is expressed by a magnetic flow. The force of this magnetic excitation changes depending upon the environment and the latter, therefore, can produce some effect on excitability of the organism. Hence the force of this magnetic field of one person (we suppose a man and a woman) begins to interact with another one. An internal excitation of the man creates one potential. The externally applied potential may contribute to the internal excitation. The human being perceives the externally applied potential by his olfactory, visual, sensual and auditory organs and the surrounding magnetic field which is not possible to see, hear and even feel.

Paralogical thinking is observed mostly in schizophrenia and is characterized by a disturbance of logical relations in judgements, conclusions, arguments, cause-effect correlations. Here it is often possible to observe preservation of memory, ability to count, understanding and reasonableness with respect to many everyday occurrences. In case of paralogical thinking, the patient may use expressions with an inappropriate meaning, not caring whether some or another expression has any definite contents and meaning, there is no reasonableness and criticism with respect to logical mistakes; these

mental disorders are difficult to correct. In paralogical thinking, the patient would ignore real true prerequisites and arguments, using instead of them conclusions which do not have any logical relation with the initial judgements.

Slide-down, amorphous thinking: it is a deviation from the main thought to some side-thoughts which substitute for the main one. A loss of logical relations may be complete or partial.

Non-continuous thinking is typical for schizophrenia and is manifested by absence of any semantic relations between concepts with preservation of the grammatical system of the speech. The patient's speech is deprived of contents and logical relation, though externally it seems regular because of preservation of grammatical relations. Only in case of a sharply expressed lack of continuity there is a disturbance in grammatical relations and then the speech consists of an irregular mere verbiage ("a wordy jumble"). In non-continuous thinking it is possible to observe slide-downs of the thought expressed in passing from some notion to another one without any natural logical relations, there is appearance of associations by a "weak" or "latent" sign. It is not in rare cases that the patient's speech does not depend upon presence of an interlocutor (a symptom of monologue), the speech does not fulfill its function of communication any more, it becomes incomprehensible for the surrounding people.

Here are some examples of speech of patients with non-continuous thinking:

"A cake of imperialism – it is forty chickens – having become sad, they were drawing her eyes on Whatman paper of the Moon, but a millionaire was whistling."

"Show... I will eat it... Would bake pies... I don't know...I'll cut off the same one... pies... About neither Ivan nor Darego... Show... will be done by me... plastics... I'll eat... give a disk for pies."

"I'll take all in my fist, carry... maybe rotated. Well, here you are... Ivan-pie... to press a button... to turn round... a small study... to walk on a platform."

"And I am rolling a cigarette; but why a cigarette, maybe a single rat? Or maybe not a cigarette but a cake-dad. If a cake is dad, then cream will be mum."

"Thank you, my dear fellow, that I am not Kate. Aunties and uncles, be so kind, look at my amiable finger."

Here is an example of "a wordy jumble": *"Khiumala, riumala, piumala, zhiumala, mex, regis, pan, pan, pan, yarbin, dirbin, palamida, bruda plet, yatka, purus, lakkhid, elivator, acquirated, maniloid, tiuligen, thirty three, twenty five and two, twelve, twenty two, have mercy upon me, O Lord, let this soul repose with the saints, sands, cents, dollars mine, yours, Robert Burns, come, become, vemala, pemala, so, though, oh, low, no, go."*

Incoherent thinking is characterized by inability to form associations; separate perceptions, images, concepts are not connected among themselves. There are no, even primitive, mechanical associations by likeness, by contiguity in time and space. The patient is disorientated in time and place, does not understand what is taking place around him, he is confused. The patients' speech is incoherent, it consists of separate, casual words, not connected either by meaning or grammatically, the phrases are constructed in wrong ways.

Incoherent thinking is observed in acute exogenous psychoses, accompanied by a disturbance of consciousness in the form of amentia, and is indicative of a severe state of the patient.

Below is an example of the speech of a patient with incoherent thinking:

"Sewed... got cold... bang... roar... never... yes, yes, to nobody... spun... cornfields... oh-oh-oh. But the mother is so young, very young, pyoung... tibol and nif... an utter rout."

Autistic thinking rests upon the patient's inner feelings, his subjective aims, wishes, fantasies, rather than on real facts. The patient does not pay any attention to the fact that his thoughts contradict the reality. Rather often it appears as "a dawn" and is expressed in realization of the patient's "innermost wishes".

Symbolic thinking: the patient supplies various concepts with some allegorical meaning which is absolutely unclear for other people, but for the patient himself has a certain sense. The patient may symbolically understand the speech of the surrounding people, the meaning of colours. For instance, having seen a nursery maid wearing a yellow jacket a female patient declared: "She is a traitor, because yellow is the colour of treachery".

Verbigeration is a senseless repetition of the same words or scraps of phrases or a simultaneous appearance of two contrary thoughts. It is typical for schizophrenia.

***Perseverations and stereotypies of thinking**:* sticking to some representations. They are manifested by repetitions of the same words or sentences many times, and for this reason the patient's answers sometimes become senseless.

It is not in rare cases that perseverations and stereotypies accompany aphasia in patients with apoplectic or senile dementia, they are also observed in other organic lesions of the brain.

Here is an example of the speech of a patient with perservation:

Question: "What are your first and second names?"

Answer: "Piotr Ivanovich."

Question: "In what year were you born?"

Answer: "Ivanovich."

Question: "Where do you live?"

Answer: "Ivanovich."

***Affective thinking**:* the patient constructs his judgements and conclusions on the emotions and wishes prevailing at the moment, rather than basing on logic.

Fixed ideas are representations and thoughts which appear involuntarily (irrespective of the patient's will) and are alien to the contents of consciousness at this moment; they are characterized by a critical attitude of the patient to them, understanding of their morbid character, as well as by an active aspiration for getting rid of them. Unlike delirium, patients with fixed ideas preserve their critical attitude to them, the course of these ideas is episodical, fit-like. They are observed in neurosis of annoying states, in psychasthenic psychopathy.

Dominant ideas are right thoughts which are connected with the life, prevail in a person's consciousness and sometimes prevent him from concentrating on the current activity. For instance, constant thoughts about a sick child during work. They are more frequently observed in depression.

Overvalued ideas are judgements resulting from real circumstances but owing to their emotional saturation they take the prevailing meaning in the consciousness which is disproportional to their objective importance. Overvalued ideas are fruitless, the thinking becomes unilateral, everything that is not connected with the overvalued aim or contradicts it is ignored and suppressed. Overvalued ideas may affect the behaviour, inciting the subject to exclusive actions.

Unlike delirium, overvalued ideas yield to correction, though with difficulty, under the influence of forcible logic arguments and a change of life circumstances, it contributing to a loss of their affective saturation and urgent significance. They are observed in psychopathies, schizophrenia, affective psychoses.

Delusion-like fantasies are relatively short-term and most typical for juvenile psychopaths who want to appear before people of their age playing a hero, an outstanding personality, and with this purpose they exaggerate facts, invent fables and believe in them themselves.

Forced thoughts are elementary, they appear in the consciousness unexpectedly, any stage of doubt and struggle is absent. The patients would ask to keep them from throwing themselves into a stair-well, spitting into somebody's face, because they are not sure that they are able to control themselves. Such thoughts are observed in patients who suffered encephalitis, a brain injury.

Delusions are wrong judgements and conclusions which appear on a morbid basis, completely seize the patient's consciousness and do not yield to correction. They reflect reality in a distorted way, are notable for constancy and firmness; any attempts to dissuade the patient, prove him incorrectness of his delusional constructions, as a rule, result only in intensification of delirium. Typically the patient is convinced and confident in an absolute reality and reliability of delusive feelings.

Development of delirium is connected with a certain dynamics in the patient's state. At first, there are emotional disorders in the form of internal tension, unexplained anxiety, foreboding of some inevitable evil, increasing alarm. The patient tries to understand what is going on, why the surroundings have acquired a new meaning which is not clear for him, often there is appearance of a delirious perception: everything around seems unreal, artificial or threatening, ominous, having some particular meaning hidden from the patient. Delirious perception is directly connected with formation of delirious representation, on whose basis some events in the past of the patient's life are particularly distinguished in their new meaning. Finally, there is development of delirious realization: a peculiar dawn with realization of the essence of events not understood before, delusional judgements receive some concrete contents, it is accompanied by a subjective sense of relief, emotional calming – crystallization of delirium occurs.

Primary delusion is based on false interpretations originating from either real facts of the outer world or inner sensations and feelings. The patients interpret behaviour of the surrounding people and their statements in an unexpected way. The same happens with respect to inanimate objects too.

This delusion is systematized, stable, expanding and complicating.

Secondary (sensual, imagery) delusion appears in presence of other mental disorders: hallucinations, disorders of emotions and consciousness. Its intensity corresponds to that of these mental disorders. Most frequently, sensual delusion appears acutely, usually it is unsystematized, unstable, its plot is vivid, but unstable.

Depending upon the contents of statements, the following kinds of delusion are distinguished: delusions of persecution, influence, poisoning, jealousy, self-condemnation and self-humiliation, grandeur, etc., the name usually reflecting the contents of delirious feelings.

The delusion of grandeur is manifested in the patients' statements that they are people of outstanding intellect and great strength. In the delusion of wealth the patient states that he possesses great treasures. Different clinical kinds of delusions are not specific for some definite mental disease. Thus, delusions of grandeur, high origin and wealth may be observed in the maniacal phase of the manic-depressive psychosis, in the expansive form of general paralysis of the insane, paraphrenic states of various genesis. Within the limits of each nosological form the delusions have their clinical peculiarities. In the maniac syndrome, delusions of grandeur depend upon the affective state and do not reach any significant expressiveness; in general paralysis of the insane, delusions are absurd, amorphous, unstable; in the structure of the paraphrenic syndrome, delusions are of a systematized character.

In the delusion of invention, the patients tell about their invention of various apparatuses, devices and instruments which are to improve the life of the mankind. Such a kind of delusions is often observed in the paraphrenic syndrome within the framework of schizophrenia.

In case of erotic delirium, the patient feels personal interest taken in him by some representatives of the opposite sex. The object of delirious feelings is usually subject to a real persecution from the side of the patient who sends her numerous love-letters, makes appointments. Often it is accompanied by the patient's morbid overestimation of his own personality. This delirium is most frequently observed in schizophrenia.

Delusions characterized by a negative emotional tint are typical for depressive states. These are delusions of self-condemnation, being sinful, impoverishment, a bodily defect, in hypochondria. The delusions of self-condemnation, self-humiliation and being sinful are observed in the expressed circular depression. In involutional melancholia there are delusions of self-condemnation and impoverishment passing against a background of the anxious-depressed affect.

The delusions of reference are manifested in the fact that any event or act of the surrounding people acquires a particular significance in the patient's eyes. The red colour of the traffic light means that there will be bloodshed. As soon as the patient takes a tram all people inside it begin exchanging glances.

The patient with delusions of persecution would state that he has become an object of persecution by some people or their group who have united with the aim to kill him. It should be remembered that such patients represent a certain social danger, because often from the persecuted they become persecutors and inflict severe injuries to their imaginary offenders.

In case of the delusion of influence the patients are convinced that they are subject to influence with help of various devices, rays (delusion of physical influence) or hypnosis, telepathic suggestion at a distance (delusion of psychic influence). Patients with delusions of poisoning state that somebody adds some poison to their food, fills the flat with a lethal gas, etc.

The delusions of reference, influence, persecution and poisoning are most frequently observed in schizophrenia. The delusions of poisoning accompanied by those of a bodily defect are observed in involutional psychoses.

In the delusion of reference supplementing the delusions of persecution, the patient takes events indifferent to him as referring to himself. What is going on around him has a double meaning, everything is of particular significance (delusion of special meaning).

The delusion of jealousy is characterized by the patients' statements about adultery of their partners in marriage. The patients spy upon their wives or husbands, constantly try to find out proofs of the adultery; all the behaviour, appearance, statements of the spouse, his/her surroundings and events are

considered as "evidence" testifying to the adultery. It is not in rare cases that such patients are socially dangerous as they may make attempts to kill the unfaithful spouse and his/her imaginary lovers. The delusion of jealousy is observed in schizophrenia and alcoholism.

Induced delusions originate in a mentally healthy person as a result of adoption of delusions from a mental patient with whom the induced subject contacts. Most frequently it develops in personalities with a low intellectual level, who are unable to correctly comprehend the situation in a critical way and have increased suggestibility. In these cases the induced person begins to state the same delusions and in the same form as the mental patient does. Usually they are people from the patient's surroundings who have particularly close personal contacts with him and are his family members or relatives. Appearance of the induced delusion is facilitated by the patient's deep conviction in the truthfulness of his thoughts as well as by the authority he had before the disease.

Patients with the delusion of pretence, the delusion of intermetamorphosis state that everything around them is specially fabricated, scenes of some performance from their life are played, it is carrying out of an experiment, a double game, everything continuously changes its meaning: at one moment it is a hospital with its medical staff and patients, at another one it is some investigation establishment; the physician is not a physician, but an investigator, the case report is a file with his personal records, the patients and medical staff are disguised officers of security services.

The delusion of damage: the patients believe that evil-wishers inflict them some material or moral damage, rob, spoil their belongings, defame them, infringe upon their rights. Usually it is manifested within the framework of the delusion of persecution.

The delusion of litigiousness, or querulousness: the patients convinced in an inattentive, unjust or ill-disposed attitude to them provoke conflicts, devote themselves to disclosures, waste for it much strength, time and sometimes all their material resources, complain to various establishments and departments, involving still more and more new people into their delusions; the subjects of the delusions are drawn from the real situation: squabbles with their neighbours, conflicts with members of their family and colleagues.

In case of the depressive delusion with hypochondriac subjects at an old age, statements easily become of a grotesque, megalomaniacal character. Here, by its contents, the delusion becomes nihilistic, or the delusion of negation. For example, at first the patient states that he has an undiagnosed severe disease of his stomach and he is dying of it; later he makes statements that he has no stomach as it has already rotted and there is some emptiness in its place; soon one may hear that the patient himself does not exist either, he is a living corpse, he has decomposed alive; still later he says that there is nothing – no world, no life, no death (Cotard's syndrome).

The hypochondriac delusion is connected with a conviction of having a severe incurable ailment. Close to it is dysmorphomania which may be defined as a delirious conviction in the presence of a bodily defect, most frequently of visible parts of the body: the form or size of the nose, ears, teeth, arms, legs, etc. Dysmorphomania is characterized by depression, a careful disguising of their "bodily defects" by the patients, an activity aimed at correction of the imaginary defect up to surgical operations, a tendency to appearance and development of delusions of reference.

SPEECH DISTURBANCES

Thinking is expressed through oral and written speech whose disturbances occur in various diseases.

Two main forms of the oral speech disturbances are distinguished:

a) those caused by mental disorders (affect, delirium, a cloudiness of consciousness, etc.) and b) those caused by an organic lesion of the brain, where first of all sensory-motor "instruments" of the speech suffer. Sometimes, speech disturbances caused by neurotic states are distinguished too.

Speech disturbances caused by mental disorders concern its rate, articulation, grammatical system and contents.

Accelerated speech. A slight degree of accelerated speech in some cases is manifested by verbosity, in others it alternates with sayings, puns, aphorisms, metaphors and quotations adopted from works of literature; it makes the speech more figurative and expressive. The consistency and meaning of statements here obviously do not suffer. In case of a marked acceleration of speech the patients do not have time to finish a begun thought, the phrases are suddenly brought to an end, the subjects of state-

ments are continuously changed, and the speech itself becomes curt, rather often it is interrupted by questions for which the patients do not expect to receive any answers and go on talking themselves. The speech may alternate with laugh, cries, whistling, singing, etc. Here the meaning of statements and their consistency are always disturbed. A further acceleration of the speech results in the fact that statements begin to become phrases with an uncoordinated meaning, consist of isolated words and, lastly, there may appear scraps of words or inarticulate sounds.

In slow speech, spontaneous statements decrease in number. The stock of words becomes poor, the grammatical structure of phrases simplifies. In a number of cases the patients answer in one syllable: "yes", "no", etc. The free speech may completely disappear, this symptom is termed mutism.

Disturbance of articulation is manifested by an increase in the sound intensity up to crying or, on the contrary, its weakening down to whispering. Depending upon affective and other disturbances, there may be theatrical, grandiloquent, pathetic speech or, on the contrary, it is moaning, lamenting. Changes in the speech articulation depend upon the stresses made on separate words or phrases, on appearance of intonations unusual for this person, e.g., in puerile speech. Peculiarities of articulation are manifested in such shades of speech when it contains confidence, peremptoriness, evasiveness, reservations, sugariness, sugariness, humility, bewilderment, anxiety, etc.

Disturbances in the grammatical system and contents of statements usually do not represent an isolated disorder. In many cases they are closely connected with the rhythm of speech and articulation.

These disturbances are as follows:

Bradyphasia*:* a common term for all cases of slow speech.

Verbigeration (stereotypic speech)*:* a monotonous repetition or screaming out of the same short phrases, words or interjections.

Anxious verbigeration: a monotonous repetition or screaming out of short phrases, words or interjections having some depressive contents: "send me to a crematory", "it is terrible, it is terrible, it is terrible; I am dying, I am dying", etc.; "oh, oh, oh", etc.

Glossolalia (**cryptolalia**): creation of one's own language in which neologisms prevail. In every patient, the vocabulary and syntax are constant; thereby it makes possible to understand to some extent what they say.

Logorrhea (polyphrasia, incontinence of speech): rapid, garrulous speech; it may be accompanied by incoherence of its contents.

Miss-talking (miss-speech): the patients' answers are not connected with the questions asked to them; sometimes their out-of-place answers include some words from the question.

Monologue*:* uninterrupted speech addressed to an interlocutor but caused first of all by the patient's inner state rather than by a necessity to exchange opinions. In a monologue, the patients may pay no attention to any questions asked but go on talking themselves. A monologue may consist of words which are correctly pronounced and syntactically united, but to a significant degree it may be made of fragments of words and paraphasiae (verbal and literal), be accompanied by logoclonism and disturbed syntax (Alzheimer's disease). If a monologue is a constant form of speech it is a reliable indication of some mental disease in combination with negative signs.

Mutism*:* absence of any verbal communication with surrounding people, but the speech apparatus is intact.

Elective mutism*:* absence of verbal communication when talking about certain subjects, in certain situations or with respect to certain people. **Hysteric mutism**: absence of verbal communication accompanied by expressive or hyperexpressive facial expression and movements.

Mirror speech*:* pronunciation of words (read, heard, spontaneously appearing) from their end.

Pretentious speech (mannered speech): use of the words which are uncommon, hardly understood or have an inappropriate meaning.

Oligophase speech (oligophasia): slow, monotonous (plateau), grammatically simplified speech with scanty words.

Puerile speech*:* use of words and turns of speech typical for children by an adult: use of diminutive words, lisping, burr, a simplified or distorted grammatical structure of phrases, mentioning of oneself as the third person.

Sugary speech*:* slow speech with use of diminutive forms of words, trite expressions containing a lot of attributes with a positive affective assessment ("sweet, good, dear").

Telegraphic speech consists of short or desultory phrases having no prepositions and conjunctions.

Echo speech (echolalia): an automatic single or multiple (echopalilalia) repetition of some words (echophrasia) heard from the surrounding people.

Schizophasia (schizophasic speech): a form of broken speech (a set of words having no meaning is united into phrases which are constructed keeping grammar rules.

Speech disturbances mostly caused by organic lesions of the brain

Aphasia: a disturbance of speech with an absolute or partial loss of ability to understand anybody's speech or use words and phrases for expressing one's own thoughts; the articulation apparatus and hearing are intact.

Amnestic aphasia (nominal aphasia): loss of the ability to name objects with preservation of the ability to describe them. An inability to name fingers is the initial manifestation of amnestic aphasia.

Motor aphasia (expressive, Broca's aphasia): a disturbance in the motor activity of speech with preservation of understanding oral and written speech.

Sensory aphasia (semantic aphasia): a disturbance in understanding speech.

Dysarthria (dysarthric speech): a disturbance of articulation with an unclear pronunciation (slurred, staggering speech), slow or interrupted speech.

Jargonaphasia: a variety of sensory aphasia with incoherent speech, garrulity and abundance of paraphasiae (literal and verbal).

Logoclonism: a convulsive, interrupted multiple repetition of some syllables or interjections ("ta, ta, ta, ta," etc.).

Palilalia: a multiple repetition of the last syllable in a word or the last word in a sentence.

Paraphasia: a distortion of certain elements of speech in aphasia (a disturbance in the order of words in a sentence, replacement of some words or sounds with incorrect ones).

Neurotic speech disturbances include aphonia, psychogenic aphonia and stammering.

Aphonia: absence of the sonority of voice with preservation of the whisper speech.

Psychogenic aphonia: aphonia caused by a psychic trauma. Hysteric aphonia is a variety of the psychogenic one.

Stammering: a disturbance in the fluency of speech with appearance of involuntary delays in pronouncing some sounds and syllables or with their repetition.

Ошибка! Закладка не определена.

Disturbances of intellect

Mental deficiency: a steady decrease in the level of intellect. There are two kinds of mental deficiencies: congenital (**oligophrenia**) and acquired (**dementia**).

An acquired mental deficiency is caused by epilepsy, as well as organic diseases characterized by atrophic processes in the cerebral matter (syphilitic and senile psychoses, vascular or inflammatory diseases of the brain, severe brain injuries), schizophrenia.

In schizophrenic dementia any severe disturbances of memory are never observed; a deficiency in schizophrenia concerns the emotional life and thinking in the form of the increasing apathy and splitting, disintegration in the unity and integrity of mental processes.

In epilepsy, a foreground of the picture of dementia contains changes in thinking: excessive thoroughness, "stickiness", stiffness, prevalence of the concrete-descriptive element over the generalizing one.

Lacunar and total dementiae are distinguished. The former is characterized by a decrease in the capacity for work, a progressive loss of knowledge and skills, an irregular weakening of memory, poor judgements, affective instability, loss of flexibility in mental processes, deterioration of adaptability, decrease of self-control. As a rule, the patients critically assess their intellectual defect. But the patient's attitude to the surroundings, his relatives and friends remains like it was before, a sphere of interests undergoes little changes, the convictions formed before are preserved. The personality becomes poor, but preserves its own system of relations, basic moral-ethic properties. In such cases one says about an organic decrease in the level of the personality, formation of "a residual personality".

In total dementia, a complete disintegration of the personality takes place. It is characterized by a sharply expressed narrowness in the sphere of interests coming to satisfaction of the elementary biological necessities. In the first turn, the highest levels of the personality and higher emotional manifes-

tations suffer here. The patients are roughly uncritical to their mental deficiency. In some cases, the lacunar and total dementiae are stages in the development of a pathological process. The clinical picture of cerebral atherosclerosis and syphilis of the brain may demonstrate development of lacunar dementia into total one.

Depending upon the degree of expressiveness, it is customary to divide oligophrenia (congenital mental deficiency) into idiocy, imbecility and debility. Oligophrenia has different causes: hereditary factors (50 % of all cases of oligophrenia); mother's diseases during pregnancy (intoxication, infection); a physical injury of the foetus; a difficult childbirth causing a cerebral haemorrhage or brain injuries in a newborn, etc. Unlike dementia, oligophrenia has no progradiency, i.e. a further destruction of the nervous system. In oligophrenia, a regular deficiency of all aspects of the intellect is most frequently observed, while dementia is characterized by a lack of correspondence between fragmentary remainders of knowledge, testifying to abundance of the person's former experience, and a general decrease in reasonableness and criticism. Moreover, in oligophrenia there is underdevelopment of the whole body rather than of the psyche only.

Patients with a deep degree of idiocy are characterized by absence of speech, they do not recognize the surrounding people, their facial expression is vacant, their attention is almost not attracted by anything; they swallow food without chewing it well. A sharp decrease in all kinds of sensitivity is noticed. Such patients begin to walk late. Their movements are poorly coordinated. They do not respond to other people's facial expression and gesticulation, they are slovenly in relieving nature and are not capable of self-servicing. Sometimes it is possible to observe stereotyped movements, e.g., pendulum-like swings of the head or trunk from side to side.

Idiocy of the moderate and mild degrees is characterized by an ability to laugh and weep, some understanding of other people's speech, facial expression and gesticulation. Such patients are able to fix their look on objects. There is some development of the orientation reflex in them. They can independently eat food, but do it untidily; they may comprehend some simplest situation, and though they orientate themselves in a familiar place, they absolutely lose any orientation in time. Their vocabulary is limited by several dozens of words. They recognize their relatives and friends and may demonstrate an elementary attachment.

In case of ***imbecility***, the patient's speech is more or less developed. But its development takes place with a delay, the patients begin to talk during the 3^{rd}-5^{th} year of their life. The stock of words is extremely poor. The patients understand other people's speech, facial expression and gesticulation within the range of their constant use. They do not comprehend a new situation to the end and need help, directions and guidance. They master the simplest skills but display them carelessly. With difficulty, they learn counting up to 20, can learn letters of the alphabet by heart, but are not able to master reading and writing.

Debility is a mild form of oligophrenia. The patients possess a significantly larger vocabulary than in imbecility, but lack flexibility of speech and mostly resort to stereotyped expressions, hackneyed phrases, learned turns of speech. It is not in rare cases that speech defects in the form of lisping and agrammatisms are observed. Differentiated movements are insufficiently developed, but simple forms of labour activity may be mastered. It is possible to teach such patients in conditions of auxiliary school.

Peculiarities of disturbances of thinking in children

Prevailing here are elementary disturbances, mostly of the rate. A delirium is rare; as a rule, it is unsystematized. The delirium is simple, concrete and unstable. In obsessions, manifestation of the component of struggle is insignificant. The adolescent age is more frequently characterized by delusion-like fantasies, overvalued ideas of invention and dysmorphophobic ideas.

Diagnosis of disturbances of thinking and intellect is established by conversation, observation of the patient, as well as using experimental-psychological techniques (generalization of concepts, exclusion of concepts, comparisons, classification, interpretation of a figurative meaning of proverbs and sayings, an association experiment, explanation of plot pictures, determination of the sequence of events, determination of intellect by Wechler's technique.

THE SYNDROMES ON THE TOPIC "DISTURBANCES OF THINKING. DISTURBANCES OF INTELLECT." SEE CLASS № 3.

DISTURBANCES OF MEMORY AND ATTENTION

Memory is a mental process of imprinting, preservation and reproduction of the previous experience. Disturbances of memory in mental and somatic diseases manifest themselves by an inability to memorize, retain and reproduce the material mastered. Most frequently, disturbances of memory occur in exogenous-organic (infectious, toxic, traumatic) psychoses and atrophic diseases of the brain. It is possible to observe a reduced capacity for memorizing against a background of a disturbance of attention in cases of development of overstrain states, as well as at the period of convalescence following somatic diseases.

Quantitative and qualitative disturbances of memory are distinguished. The quantitative ones include extreme retentiveness of memory (hypermnesia), defective memory (hypomnesia) or a complete loss of memory for a certain period (amnesia). Qualitative disturbances of memory (paramnesiae) are represented by cryptomnesia, confabulation and pseudoreminiscence.

Classification of disturbances of memory

I. Extreme retentiveness of memory (hypermnesia)
   1. Fixation
   2. Reproductive

II. Defective memory (hypomnesia), loss of memory (amnesia)
   1. Fixation
   2. Reproductive
   3. Retrograde
   4. Anterograde
   5. Anteroretrograde
   6. Progressive
   7. Affectogenic

III. Paramnesiae
   1. Pseudoreminiscences
   2. Confabulations
   3. Cryptomnesiae

IV. A disturbance in the sensation of familiarity
   1. Symptom of "deja vu"
   2. Symptom of "jamais vu"
   3. Symptom of one's own negative and positive double

Hypermnesia means an extreme retentiveness of memory; most frequently it is observed in maniacal states, sometimes in syndromes of impaired consciousness. It is not in rare cases that hypermnesia is accompanied by facilitation of the association process. More frequently, an intensification of the process of reproduction takes place. Thus, in situations endangering their life, people, unexpectedly for themselves, remember episodes from their childhood which were forgotten long ago. Fixation amnesia manifests itself mostly by an extreme retentiveness of the mechanical memory rather than of the logical one.

Hypomnesia means defective memory. Development of hypomnesia begins with relaxation of spontaneous reproduction (reproductive hypomnesia): the patient cannot remember a necessary word or name. Concentration of attention only deteriorates results of the search for a forgotten word, but some time later, when this word loses its urgency for the patient, it arises in the memory as if itself. It is followed by a worsened retaining of information in the memory, after that a progressing insufficiency of remembering is noticed. Hypomnesia is also characterized by an initial defect in the mechanical memory and a longer preservation of the logical, associative memory.

Amnesia, a loss of events that took place in a certain period from the memory, occurs both following the states of disturbances of consciousness and owing to severe organic lesions of the brain. In the first case amnesia usually involves a more distinctly limited period of time.

The following types of amnesia are distinguished.

Fixation amnesia: a loss of the ability to remember, a lack of the memory for current events. Fixation amnesia indicates to severe disturbances of memory, it is observed in senile dementia, Alzheimer's disease, as well as in Korsakoff's syndrome of the infectious, toxic or traumatic genesis.

Fixation amnesia is easily revealed in a conversation. The patient is told his interlocutor's first and second names, asked some irrelevant question and immediately after that requested to repeat the first and second names he has just heard. Inability to repeat indicates to the presence of fixation amnesia. Also, the patient is not able to remember the contents of the book he has just read, what he ate for breakfast, where he has put a thing he needs. Coming to a shop, such patients are unable to remember what they wanted to buy. It is not in rare cases that such patients reveal amnestic disorientation: they cannot name the today's date, month, year, the town where they live, they are not able to find their ward, bed.

Reproductive amnesia: an inability to reproduce the information required at this moment. It occurs in asthenic states, fatigue, anxiety, cerebral atherosclerosis, etc. For example, patients with cerebral atherosclerosis are unable to remember the necessary name, date, term in some crucial situation, but some time later, when the necessity in it passes away, this information may come back to their memory.

Retrograde amnesia: disappearance of some events in the memory which took place a few minutes, days or even weeks before the cause of amnesia (a brain injury, insult, epileptic seizure, poisoning, self-hanging, etc.). For instance, often a person who received a brain injury as a result of a car accident does not remember the very moment of the accident and also can say nothing about other events of that day preceding the accident, even if after the loss of consciousness he regained it and in outward appearance his behaviour is correct.

Anterograde amnesia is characterized by problems in recalling events which took and take place already after the onset of the disease. Expressiveness of the amnesia often depends upon the extent of the disturbance of consciousness. In deep disturbances (soporific state, coma) the amnesia is of a total character, while a return from delirium is followed by partial, fragmentary amnesia.

If under unfavourable exogenous effects the same patient reveals a combination of anterograde and retrograde amnesia, in these cases the term "**anteroretrograde amnesia**" is used. Retrograde or retroanterograde amnesia is one of the signs of Korsakoff's syndrome.

Progressive amnesia is a loss of the ability for memorization and a gradually increasing impoverishment of the stock of memory. It is a typical sign of senile dementia. The development of progressive amnesia corresponds to the Ribot's law: at first, the memory loses the recently acquired information, the patient forgets current events or those which took place recently, while recollections of the events which happened long ago are kept relatively long. Often at this stage of progressive amnesia there is brightening-up of recollections about the patient's remote past: the patients live by feelings of their childhood and youth, tell about intercourse with their relatives who died long ago. For example, a female patient with senile dementia names the address at which she lived with her parents in childhood, her maiden surname, but does not remember her husband's surname with whom she has lived several decades. The amnesia spreads from the new to the old, from the recent time to remote past.

Sometimes, amnesia develops in a psychogenic way. Then the patient's memory loses some definite feelings which were usually hard and unpleasant. In such cases the term "**affectogenic**, or **catamimic amnesia**" is used.

Qualitative disturbances of recollections (***paramnesiae***) designate changes in the contents of recollections.

Cryptomnesia: a distortion of the memory manifested by disappearance of differences between the real events and those ones which were seen in sleep, heard or read by the patient. In cryptomnesia, the disturbances may be both by the type of appropriation and alienation of the recollections. In the first case, somebody else's ideas or creative work, once perceived by the patient, are realized as his own, new, original. For instance, a patient may tell his interlocutor a story which he has heard himself from this person a few minutes before. In the other case, the patient may assess the events, whose participant he really was, as if they were read about or seen in a film. Cryptomnesia also includes reproduction of somebody else's thoughts as the patient's own ones, it sometimes resulting in an unrealized plagiarism.

Confabulations: false recollections with some fantastic contents, recollections of the events which did not and could not happen in the patient's life ("hallucinations of memory"). In confabulations, spotty memory defects are filled with fiction; the patient "recalls" what has never occurred in reality. For example, a female patient, who has been ill with cerebral insult, says that last week she was "launched into space" from a mountain which she describes, she states that she left there her slippers and remembers that she was very cold during the flight. Confabulations are usually picturesque, amorphous, unstable, by their plot they may resemble reality or have some evidently fantastic contents. Confabulations are observed in organic diseases of the brain (vascular lesions of the central nervous system, injuries, intoxications, infections, e.g., in cerebral syphilis) against a background of hypomnesia. Together with the fixation, antero- and retrograde amnesiae they are structural components of Korsakoff's syndrome.

Pseudoreminiscences are false recollections of the facts which did not take place at this period, but were or could be in the patient's past life ("illusions of memory"). Unlike confabulations, they are more stable and repeatedly mentioned by the patient. Pseudoreminiscences are characterized by distorted recollections of the time or place of real events. For example, when a male patient, who has been staying at a mental hospital for several months, is asked what he did a day before, he "recalls" that he was at home and lists different things which he allegedly made.

Disturbances in the sensation of familiarity

Disturbances in the sensation of familiarity comprise a specific group among the symptoms of disturbances of memory. In such cases, disturbances of memory may be accompanied by a pathology of perception, emotions, consciousness.

The symptoms of "deja vu" ("already seen") and "jamais vu" ("never seen") are distinguished. The symptom of "deja vu" comes to the thing that seeing something for the first time in his life the man feels as if it already happened to him some time before. It is accompanied by a critical understanding of the erroneous nature of this sensation. Thus, having come to a strange town for the first time, a person walks along its streets with a feeling as if he has already been here.

The symptom of "jamais vu" consists in the fact that something well familiar is perceived as strange, alien, as if seen for the first time. The criticism remains preserved, the person realizes the fact of the disturbance, he understands that it only seems to him, the knowledge of the phenomenon itself remains unchanged too. Thus, once entering his room the man actually does not recognize it, though he knows well all the peculiarities of the premise and its furniture.

Fregoli's symptom is a variety of Capgras' syndrome: such patients believe that their "persecutors" change their appearance in order not to be recognized by anybody.

Disturbances in the sensation of familiarity usually accompany psychosensory disorders and are revealed in the structure of the syndromes of depersonalization and derealization. Most frequently, these disturbances are observed in patients with encephalititides, brain tumour, consequences of a brain injury, in epilepsy, schizophrenia, manic-depressive psychosis.

Peculiarities in the patient's memory can be assessed with help of the clinical-psychopathological method: in the process of a conversation the physician checks his memory for recent and remote events asking special questions. It is necessary to check the memory for commonly known historic events. In order to assess short memory, the physician may suggest that the patient should remember and then repeat a phrase or a short story.

If the patient has paramnesiae, in a conversation with him the physician reveals contradictory answers, uncoordinated with one another. In order to facilitate detection of paramnesiae, it is possible to ask some leading questions which contain an element of suggestion. Thus, asking the patient how long ago we saw him last time we thereby cause in him a false idea that we already saw each other once. A positive answer demonstrates presence of false recollections in the patient.

When assessing the state of memory, it is necessary to take into consideration the patient's general state; e.g., in depression, patients may complain of defective memory and demonstrate its reduction caused by narrowing of the sphere of interests and reduced concentration of attention. In this case it is necessary to carry on an additional experimental-psychological study of the memory.

Presence of confabulations and pseudoreminiscences always indicates to a significant impairment of the memory. If the patients are inclined to false recollections, it is possible to receive answers which even contradict to one another rather than only do not conform to one another. It may happen that in

his answers to the questions containing an element of suggestion in itself, the patient does not give a positive reply, but at the same time he does not decline the question, does not point out its groundlessness and tries to find some corresponding recollection. It shows that the patient is not sure in his recollections, he has defective memory. In an old age, false recollections are of the character of recollections whose development is not spontaneous but results from some prompted questions or a called direction of thoughts. For instance, we ask about some letter, and it reminds of a letter received, though the patient did not receive any letters.

The technique of investigating disturbances of memory in the hospital for psychoses presupposes such a form of its performance that it should not resemble an examination. Wherever it is possible, the physician should emphasize the medical character of the study. Usually, after some introductory phrases, the patient may be asked about the state of his memory, and after his answer the physician may pass to the investigation, making it delicately and carefully in order not to grieve the patient. For instance, it is possible to ask if he knows the first and second names of his physician, and after the answer that he does not know tell him these names and ask to remember them; then the patient may be asked one or two other questions, e.g., about the name of his wife and the number of his children, after receiving his answers it is possible to ask again if the patient remembers his physician's first and second names. If the patient does not remember them, he may be asked if he has been informed today about the first and second names of his physician. Naturally, in cases of disturbances of memory it is necessary to repeat studies of this type from time to time.

Some patients refuse to undergo investigations of their memory, as they are afraid to reveal its disturbance. In such cases the physician asks questions concerning recent feelings, for example, if the patient remembers what has recently happened to him, what he has eaten for breakfast today, whether he was visited by his relatives, when he saw his physician last time. And if the patient is not able to recall what his physician talked to him about or who visited him, whether he was given an injection, how much time he has been staying at the hospital, or at different times gives different answers to the same questions, a conclusion about some pathology of his memory can be made.

In order to investigate the state of memory, experimental-psychological techniques are used: from the simplest methods (tests for memorization of words, repetition of increasing lines of figures in the direct and reverse order after an interlocutor) to rather complex techniques requiring some experience in their use (Wechsler's memory scale, Benton's test for visual retention).

Disturbances attention

Attention is concentration of consciousness on a chosen object or phenomenon, as a result this object or phenomenon is reflected clearer.

***Distractibility of attention*:** inability to concentrate on one kind of any work and objects, sometimes in combination with increased attention to some unessential things.

***Rivetting of attention**:* a reduced ability to switch attention, sticking to the same thoughts, desires. It is characterized for depressions, the patients are unable to switch to any thoughts and events which do not correspond to their feelings.

***Exhaustibility of attention**:* in the beginning of a conversation the patients are adequate, but rapidly get tired and their answers become less productive. It is typical for asthenic states.

THE SYNDROMES ON THE TOPIC "DISTURBANCES OF MEMORY AND ATENTION." SEE CLASS № 3.

DISTURBANCES OF EMOTIONS

Emotions (from Latin "to excite, to agitate") are responses in the form of subjectively tinctured feelings of an individual which reflect significance of an acting stimulus or a result of his own act for him (pleasure, displeasure).

Mood: a prolonged emotional state which does not reach any significant intensity but tincture all mental processes during several hours or days; the emotional tone may be both positive and negative.

Affect: a short-term, wild emotion accompanied by excitation of the whole psychic activity rather than by an emotional response only.

Physiological affect appears under the effect of strong stimuli, it is characterized by some one-sidedness of thinking and a stormy motor response which, nevertheless, are controlled by the con-

sciousness (a person preserves an ability to be aware of his actions and control them). The physiological affect is not accompanied by any cloudiness of consciousness, automatisms, amnesia. It is most frequently observed in asthenic states.

Asthenic affect: a rapidly weakening affect accompanied by depression, a reduction in psychic activity, general state and vitality.

Sthenic affect is characterized by a good general state, an increased psychic activity, a feeling of one's own strength.

Pathological affect appears in response to an outwardly insignificant cause; it is characterized by a wild emotional response with a disturbance of consciousness (its twilight state), a motor excitement with destructive actions, a sharp autonomic response.

Passion: a strong, steady and deep feeling that embraces the whole person and overrides the main directions in his thoughts and activity.

Classification of disorders in emotions and feelings

1. Disorders in the strength of emotions.

1) Pathological strengthening:
   a) hyperthymia
   b) euphoria
   c) hypothymia
   d) ecstasy
   e) depression
   f) alarm
   g) irefulness

2) Pathological weakening:
   a) paralysis of emotions
   b) apathy
   c) emotional flattening
   d) emotional bluntness

2. Disorders in the motility of emotions:
   a) faint-heartedness (unrestrained emotions)
   b) lability
   c) inertness (stickiness) of emotional feelings
   d) explosiveness

3. Disorders in the adequacy of emotions:
   a) inadequacy
   b) ambivalence
   c) phobiae
   d) dysphoriae
   e) dysthymiae
   f) pathological affect.

Hyperthymia: a merry, joyful mood accompanied by a surge of cheerfulness, an excellent general state, easiness in solving problems. It is accompanied by a lively and rapidly changing facial expression which reflects a picture of rapidly appearing and disappearing emotions.

Euphoria: pathologically high spirits, often appearing without any connection with the surrounding reality and the physical state of the patient himself.

Moria is characterized by a combination of high spirits with a disinhibited drive, foolishness, stupid and incongruous jokes, sometimes against a background of obnubilation of consciousness.

Hypothymia: low spirits, a feeling of depression, melancholy, inconsolability. The attention is concentrated only on negative events; the present, past and future are perceived only in dark colours.

Depression: a pathologically depressed, melancholic, sad mood, deep grief, low spirits. It is often accompanied by various physical painful feelings, a sensation of difficulty in breathing, heaviness in the heart region (precardiac melancholy).

Alarm: a feeling of internal anxiety, expectation of some trouble, misfortune, catastrophe. The feeling of alarm may be accompanied by a motor anxiety, autonomic responses. The alarm may grow into panic, when the patients rush about, fret or are paralysed with horror expecting a catastrophe.

Irefulness: the highest extent of irritability, maliciousness, dissatisfaction with the surrounding people accompanied by an inclination to aggression and destructive actions. It is a structural component of dysphoria, twilight states of consciousness, the psychoorganic syndrome.

Apathy: a weakening of emotions, a painfully felt indifference to the surroundings and the patient's own behaviour. The patients are not interested in the surroundings, do not express any wishes. It is usually accompanied by a sharp reduction in the mental, volitional activity. It may be observed in intoxications, after cranial injuries and infectious diseases.

Emotional flattening consists in a loss of fine differentiated emotional responses: delicacy and the ability to feel for other people disappear. The patients become importunate and impudent. It is observed in alcoholism and narcomaniae.

Emotional bluntness: a steady and absolute indifference, particularly to sufferings of other people. Weakening of emotional manifestations involves both higher and lower emotions connected with instincts. Such patients are indifferent to their disease, they do not suffer on the occasion of diseases and deaths of their parents and children.

Paralysis of emotions: a feeling of an absolute spiritual bankruptcy and indifference developing under the effect of sudden severe psychic traumas. Usually it is of a short-term character.

Lability of emotions: an easy change of emotions, a rapid transition from one emotion to another accompanied by a significant expressiveness of emotional responses. It is usually observed in hysterical psychopathy.

Faint-heartedness, emotional weakness is manifested by an unstable mood, " unrestrained" emotions, when the person's ability to control his feelings is weakened. It is particularly difficult for such patients to restrain tears in the moments of tender emotions, a sentimental mood.

Rigidity (inertness) is characterized by a protracted stickiness to some emotion whose cause has already disappeared. It is a structural component of epileptic changes of the personality, the psychoorganic syndrome.

Explosiveness: a failure to restrain affect. It is revealed in dysphoriae and manifested by strong emotional and sometimes motor responses, which are not adequate to their cause.

Inadequacy of emotions: a lack of correspondence between emotional responses and external situations, which caused them, or statements made by the patient himself. It is most frequently observed in schizophrenia.

Ambivalence: a simultaneous development of two contradictory feelings (e.g., love and hatred) to the same object. It is usually observed in schizophrenia.

Phobiae: morbid fears, characterized by the patient's critical attitude to them, his yearning for getting rid of them (for instance: the morbid fears of height, open spaces, infections, etc.). More frequently, they accompany other fixed states (thoughts, drives, actions) in patients with the compulsion neurosis, sometimes in the initial stages of atherosclerosis, in schizophrenia.

Varieties of morbid fears (phobiae)

- Agorafobia: a morbid fear of squares, broad streets.
- Aerophobia: a morbid fear of some moving air.
- Acarophobia: a morbid fear of catching scabies.
- Algophobia: a morbid fear of pain.
- Astrophobia: a morbid fear of thunder and lightning.
- Vertigophobia: a morbid fear of having vertigo.
- Vomitophobia: a morbid fear of having vomiting.
- Haematophobia: a morbid fear of blood.
- Hydrophobia: a morbid fear of water.
- Gynaecophobia: a morbid fear of women.
- Claustrophobia: a morbid fear of close spaces, small rooms.
- Nyctophobia: a morbid fear of darkness.
- Nosophobia: a morbid fear of disease.

- Cancerophobia: a morbid fear of falling ill with cancer.
- Syphilophobia: a morbid fear of falling ill with syphilis.
- AIDS-phobia: a morbid fear of falling ill with AIDS.
- Radiophobia: a morbid fear of falling ill with a radiation-induced disease.
- Oxiphobia: a morbid fear of sharp objects.
- Octophobia: a morbid fear of food.
- Thanatophobia: a morbid fear of death.
- Phobophobia: a morbid fear of fears.

***Dysthymia**:* a short-term (during several hours or days) mood disorder in the form of anxious depression with irefulness, displeasure, irritability.

***Dysphoria**:* a suddenly appearing and unmotivated disorder of emotions characterized by a strained, depressed and malicious mood with an expressed irritability and inclination to affects of anger with aggression. It is most frequently observed in epilepsy, it also takes place in organic diseases of the nervous system and psychopathy of the excitable type.

***Hypermimia**:* manifestation of mimic responses is exaggerated, wild and vivid. Expressive movements are intensified, accelerated and rapidly change.

***Amimia, hypomimia**:* impoverishment of facial expression, a set expression of the face. Expressive movements are delayed.

***Paramimia**:* inadequacy of the facial expression and expressive movements to the situation. In some cases it is manifested by a smile at a funeral, tears and grimaces, crying during ceremonial and pleasant events.

Methods of investigation of emotions

It is necessary to take into consideration the patient's subjective report about his mood, an observation of his facial expression and pantomimics, the state of autonomic functions. The physician should pay attention to the quality of sleep and appetite, the size of the pupils, moisture of the skin and mucous membranes, heart rate, blood pressure values.

Besides the clinical examination, experimental-psychological methods are used (the topical aperceptive test, Rorschach's method, Rosenzweig's method, etc.).

THE SYNDROMES ON THE TOPIC "DISTURBANCES OF EMOTIONS." SEE CLASS № 3.

DISTURBANCES IN EFFECTOR-VOLITIONAL SPHERE

The effector-volitional sphere consists of two main components: a) ***effector***, or ***motor*** (simple and complex movements, actions and acts), and b)***volitional*** (an ability for a conscious and purposeful control of one's own activity and acts).

Classification of purposeful activity

1. Voluntary, or complex volitional actions.
2. Automated actions.

Classification of instinctive drives

1. Food.
2. Sexual.
3. Self-preservation.

Instinct is the most complex chain unconditioned reflex directed at satisfaction of biological requirements of the organism (food, sexual, self-preservation). It may include simpler actions of an involuntary character.

Voluntary actions: realized purposeful volitional actions based on the past experience and directed at adaptation of the human being to the environment, at achievement of some task consciously set as an object.

Automated actions are simple and complex motor acts, which are voluntary by their origin, but in the process of training acquire an automated character not controlled by the consciousness.

Classification of effector-volitional disturbances

I. Disturbances of drives

1. Disturbances of food drives:
   a) intensification (bulimia, polyphagia)
   b) weakening (anorexia)
   c) polydipsia
   d) perversion: parorexia (coprophagy, etc.)
2. Disturbance of the instinct for self-preservation:
   a) intensification (active-defensive form: aggressiveness, etc.; passive-defensive form: "an imaginary death", etc.)
   b) weakening (suicidal acts)
   c) perversions (self-torture)
3. Disturbances of sexual drives:
   a) intensification (hypersexualism: satyriasis, nymphomania)
   b) weakening (hyposexualism, frigidity)
   c) perversion (narcissism, exhibitionism, voyeurism, transsexualism, transvestism, onanism, fetishism, sadism, masochism, pedophilia, gerontophilia, homosexuality, etc.)
4. Obsessive actions
5. Forced actions
6. Impulsive actions

II. Disturbances of volitional motives

1. Hyperbulia
2. Hypobulia
3. Abulia
4. Parabuliae
5. Ambivalence

III. Disturbances of attention

1. Distractibility
2. Rivetting
3. Exhaustibility

IV. Psychomotor disturbances

1. Signs with difficult motor activity:
   a) catalepsy
   b) hood sign
   c) passive-subjected state
   d) negativism
   e) mutism
   f) specific disorders in the development of school skills (dyslexia, dysgraphia, dyscalculia, acalculia, dyspraxia)
2. Signs with excitement and inadequacy of motor activity:
   a) hyperkinetic disorders
   b) impulsiveness
   c) stereotypies
   d) echopraxia
   e) verbigeration
   f) miss-speech

V. Syndromes of motor disturbances

1. Stupor:
   a) catatonic
   b) depressive
   c) apathetic
   d) psychogenic
2. Excitement:
   a) catatonic

b) maniacal
c) hebephrenic
d) hallucinatory-delirious
e) in disturbances of consciousness

Bulimia and ***polyphagia*** result from a morbid enhancement of the food instinct (drive) characterized by a constant overmastering strong desire for food, voracity and an absence of the sensation of satiation. They are observed in organic lesions of the brain, endocrine disorders.

Anorexia: a morbid oppression of the food instinct (drive) expressed in absence of appetite or aversion for food. It may be of the psychogenic origin (psychogenic anorexia). It should be differentiated from a refusal to eat caused by hallucinations or delusions. Anorexia is observed in depressive, severe asthenic states and a number of endocrine disorders.

Polydipsia*:* unquenchable thirst, an increased consumption of fluid. It is typical for endocrine diseases.

Perversion of the food instinct (drive) is manifested by eating inedible substances (earth, slaked lime, faeces, etc.). It is observed mostly in schizophrenia, organic lesions of the brain.

Intensification of the instinct for self-preservation may be basically manifested in two contradictory phases: a) passive-defensive (a striving for avoiding dangerous, complex situations and responsible decisions, timidness, indecision, cowardliness, responses of "an imaginary death", etc.), and b) active-defensive (responses of protest, various kinds of aggression, etc.).It is observed in complex forms of behaviour in psychopathies, neuroses and other morbid states.

Weakening of the instinct for self-preservation is manifested in a reduction of the interest, i.e. indifference to one's own life, and in suicidal acts (particularly combined with the depressive affect). It is observed in psychopathy, psychogenic diseases, schizophrenia, the manic-depressive psychosis, etc.

Perversion of the instinct for self-preservation is manifested in acts of self-torture, inflicting various mutilations to oneself, swallowing metal and other objects, etc. It is observed in schizophrenia, organic lesions of the brain, psychopathies, etc.

Hypersexualism*:* an excessive sexual drive with corresponding behaviour, which sometimes acquires the character of sexual dissoluteness (satyriasis in males, nymphomania in females).

Hyposexualism*:* lessening of sexual drive (some forms of impotency in males, frigidity in females) with absence of sexual feelings to people of the opposite sex. Its origin may be different (psychogenic and endocrine-organic).

Sexual perversions are disturbances of the sexual instinct manifested in perversion of its direction or forms of its manifestation. They are observed in oligophrenia, dementiae, psychopathy and a number of other morbid states; rather often their manifestations result in sexual offences.

Varieties of sexual perversions are as follows:

a) *narcissism:* finding sexual satisfaction in self-admiration, admiration with one's own naked body;

b) *exhibitionism:* finding sexual satisfaction in exposing one's own genitals and sometimes masturbation in presence of people of the opposite sex;

c) *onanism (masturbation***)**: sexual self-satisfaction by means of masturbation (stimulation of one's own genitals);

d) *fetishism*: finding sexual satisfaction by means of admiration with a fetish (a toilet article of people of the opposite sex, etc.), sometimes in combination with masturbation;

e) *sadism:* finding sexual satisfaction in torturing one's sexual partner;

f) *masochism:* the opposite phenomenon (sexual satisfaction while receiving pain stimuli from the partner);

g) *pedophilia:* a sexual drive (and its satisfaction) towards children; *gerontophilia:* the same towards old people; *necrophilia:* a drive towards corpses; *zoophilia:* a drive towards animals;

h) *homosexuality:* a sexual drive and its satisfaction with people of the same sex;

i) *transsexualism*: a disturbance in the sexual identification, a constant feeling of the inadequacy of one's own sex and an active yearning for changing it;

j) *transvestism:* a pathological stable striving for wearing clothes, having haircut/coiffure, playing the part of a person of the other sex, but it is not characterized by any striving for an anatomical change of one's own sex or a wish to get rid of the primary and secondary sexual characters;

k) *voyeurism*: a drive for viewing somebody else's genitals and spying sexual intercourses between other people.

Obsessive actions and drives: these are suddenly appearing drives and actions which are alien to the contents of the consciousness at the given moment, with a critical attitude towards them and a yearning for getting rid of them.

Forced actions: actions or acts appearing without one's own will, irrespective of the personality; they are fulfilled without any struggle of motives, with a feeling of their forced and alien character.

Impulsive actions: sudden, outwardly unmotivated, meaningless actions and acts. They include:

a) dromomania – a periodically appearing yearning for a change of places, vagabondage;

b) kleptomania – a periodical drive for unmotivated stealing, thieving;

c) pyromania – an overmastering desire for arsons;

d) a pathological inclination to gambles;

e) trichotillomania – a pathological desire for pulling out one's own hair;

f) dipsomania – an overmastering desire for alcoholic drinks;

g) narcomania – an overmastering desire for narcotics.

Parabulia: a perversion of the volitional activity accompanied by a corresponding activity, negativism, impulsiveness, pretentiousness owing to the psychotic symptoms the patient has (delirium, hallucinations, etc.).

Ambivalence: a double contradictory response to the same stimulus, a duality of acts, actions, movements.

Hyperbulia: a pathologically intensified desire for activity (general – in hypomaniacal and maniacal states, unilateral – in drug addicts, in paranoid and paranoiac states).

Hypobulia and ***abulia:*** a morbid decrease or an absolute absence of any motive for activity. They are observed in the apathoabulic syndrome of various genesis (in schizophrenia, severe injuries, etc.).

Distractibility of attention: inability to concentrate on one kind of any work and objects, sometimes in combination with increased attention to some unessential things.

Rivetting of attention: a reduced ability to switch attention, sticking to the same thoughts, desires. It is characterized for depressions, the patients are unable to switch to any thoughts and events which do not correspond to their feelings.

Exhaustibility of attention: in the beginning of a conversation the patients are adequate, but rapidly get tired and their answers become less productive. It is typical for asthenic states.

Catalepsy: an increase of the muscular tone creating an ability for keeping a given posture long.

The hood sign: the patient lies or sits immovably, having pulled a gown or a sheet on his head and leaving his face open.

Passive subjection: having the usual muscle tone, the patient does not resist to changes in the position of his body, posture, extremities.

Negativism: the patient's resistance to requests made by the surrounding people. In the *passive* negativism, the patient simply does not follow an instruction, in the *active* one he makes an action contrary to the instruction.

Mutism: absence of speech with preservation of the speech apparatus.

Dyslexia: difficulties in recognizing words and understanding the written speech.

Dysgraphia: an isolated disorder of spelling. The written speech is characterized by a large number of grammatical and stylistic mistakes, in many places the text is crossed out and rewritten.

Dyscalculia, acalculia: difficulties in making the simplest arithmetical operations, in using mathematical terms, in recognizing figures and mathematical symbols.

Dyspraxia: a disturbance in the development of the motor functions (awkwardness, clumsiness of movements and fine motility, it is difficult to button up the clothes, take objects without dropping them, children often fall down in the process of walking).

Hyperkinetic disorders are more frequently observed in boys at the prepubertal age. Their main signs are as follows:

1) a disturbance of attention (inability to fulfill any task without mistakes, to put a finish to any work begun, to organize one's own work, to listen to reproofs made by older people, the patients refrain from any work requiring assiduity);

2) hyperreactivity (the patients wave their arms and legs, often fidget on seats, cannot stay in one place long, run, make noises, do not respond to reproofs);

3) impulsiveness is manifested by violations of discipline, as the child is unable to foresee consequences of his acts; the children are often aggressive; they would answer a question without having listened to its end, they cannot wait for their turn in games, interfere in talks or games of other children, are too garrulous and disobedient.

Stereotypy: a multiple repetition of the same movements.

Echopraxia: repetition of gestures and movements made by the surrounding people.

Echolalia: repetition of words and phrases said by the surrounding people.

Verbigeration: repetition of the same words.

Miss-speech: the patient's answers do not correspond to the meaning of the questions asked to him.

General psychomotor excitement: a state of a pathological motor excitement accompanied by disturbances of thinking, emotions and other psychic functions.

Maniacal excitement: an increased motor activity, a yearning for some purposeful activity accompanied by euphoria, rapid and superficial thinking. The activity and thinking are not productive owing to instability of attention. It is typical for the maniacal syndrome.

Hebephrenic excitement: an increased motor activity in the form of purposeful, fanciful, awkward movements in combination with foolishness and non-continuous thinking (the hebephrenic syndrome). It is observed mostly in schizophrenia.

Catatonic excitement: senseless, purposeless movements, sometimes an impulsive excitement with unmotivated aggression; it is accompanied by stereotypies (stereotyped "hyperkineses"), echopraxiae (repetition of movements made by the surrounding people), echolaliae (repetition of words said by the surrounding people) and ambivalence (a duality of acts, actions, movements). It is observed mostly in schizophrenia.

Psychomotor excitement in states of disturbed consciousness: the states of an increased motor activity which is characterized by: 1) complex automatic and instinctive movements (in trance and somnambulism), 2) complex actions and acts caused by hallucinatory and delirious feelings (in the delirious and other syndromes), 3) a chaotic subcortical excitement (in a deep cloudiness of consciousness).

General psychomotor inhibition: a state of a pathological motor inhibition with a slowed rate in the course of all psychic functions (thinking, speech, etc.). It is a structural component of the depressive, apathoabulic and asthenic syndromes.

Stupor: a state of immobilization resulting from an inhibition of the motor functions.

Catatonic stupor: an absolute or partial immobilization accompanied by a passive or active negativism and mutism. In some cases, the patients keep a given posture (wax flexibility, catalepsy), keep their head over a pillow long ("an air pillow"). It is a structural component of the catatonic syndrome, it is more frequently observed in schizophrenia.

Depressive stupor: a state of immobilization accompanied by slow speech, a feeling of melancholy, sometimes alarm and fear, a set suffering facial expression, ideas of self-condemnation and self-humiliation. It is a structural component of the depressive syndrome.

Apathetic stupor: a state of immobilization accompanied by an emotional bluntness and absolute indifference observed in organic lesions of the brain (an impairment of the frontal lobes), in some forms of schizophrenia.

Psychogenic stupor: a general immobilization up to an absolute rigidity which appears in strong sudden psychic traumas (catastrophies, natural calamities, etc.)

THE SYNDROMES ON THE TOPIC "DISTURBANCES IN EFFECTOR-VOLITIONAL SPHERE." SEE CLASS № 3.

Control questions:

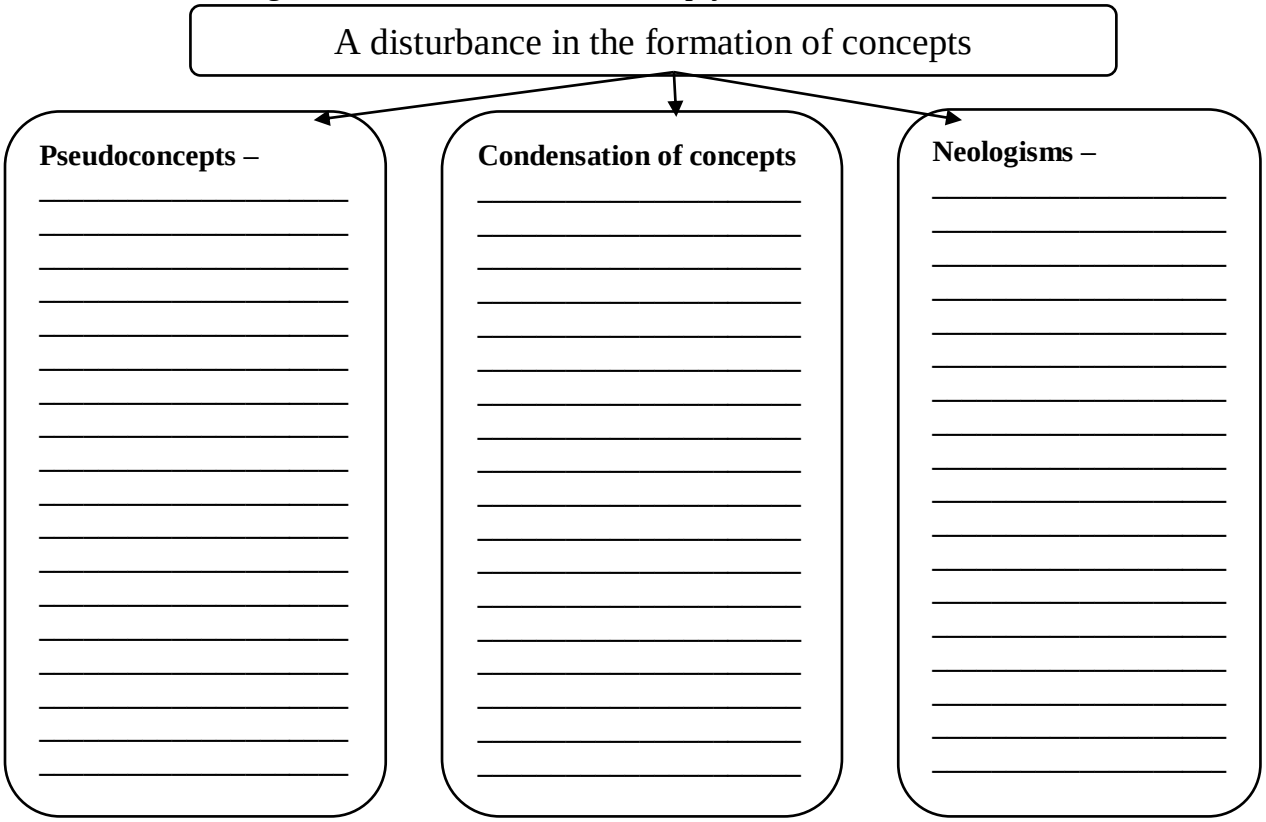
1. Enumerate and give the definitions of a disturbance in the rate of thinking:

2. Enumerate and give the definitions of a disturbance of logic of judgments:

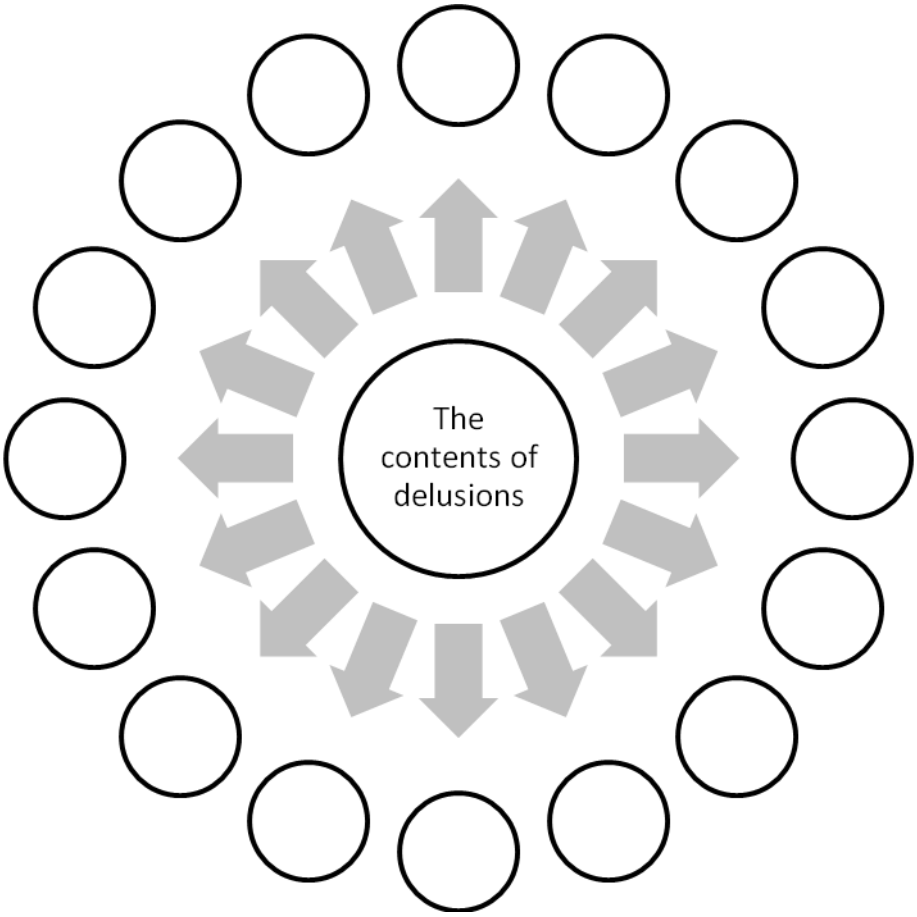
3. What are the differences between obsessive, impulsive, forced impulses and actions?

4. Masked depression, their types. What is the dangerous of this state?

5. Disorders of thinking. Give definitions & Fill the empty cells



Forms in the formation of delusion



Qualitative disorders of memory

Paramnesiae – _____
_____

Cryptomnesia – _____
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Confabulations – _____
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Pseudoreminiscences – _
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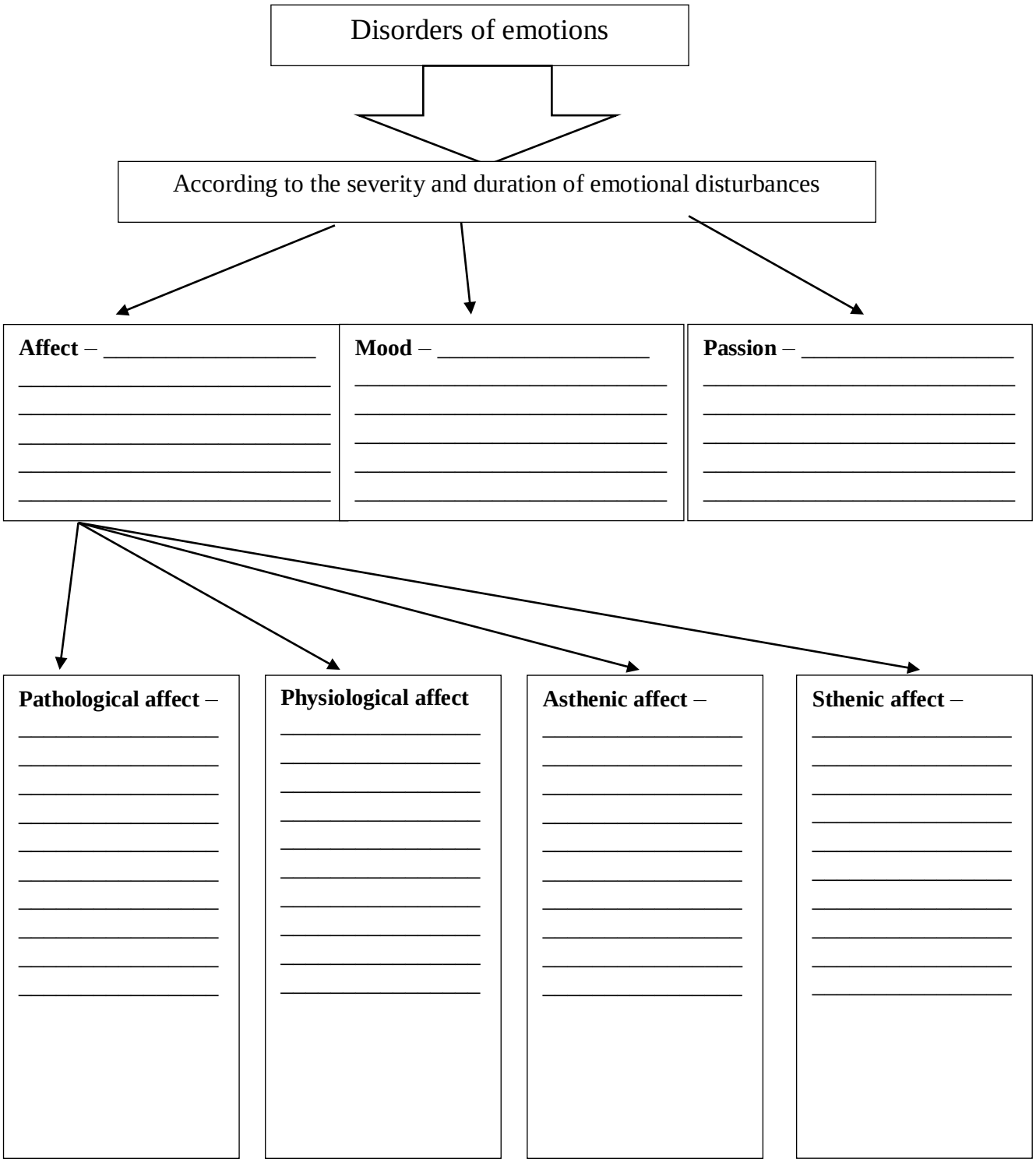
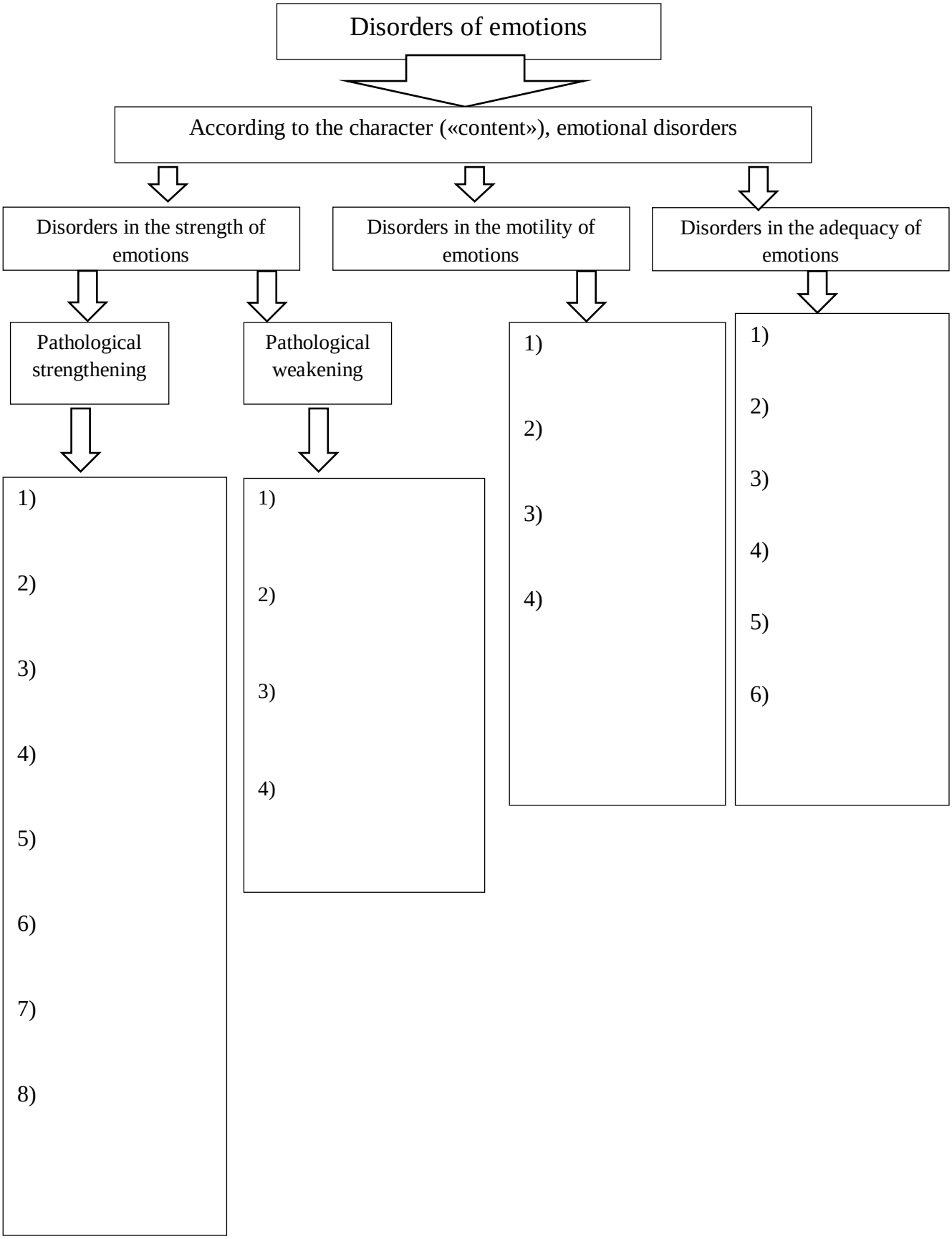
6. Disorders of emotions. Give definitions & Fill the empty cells




Disorders of emotions
According to the character («content»), emotional disorders
Disorders in the strength of emotions
Disorders in the motility of emotions
Disorders in the adequacy of emotions
Pathological strengthening
Pathological weakening
1)
2)
3)
4)
5)
6)
7)
8)
1)
2)
3)
4)
1)
2)
3)
4)
1)
2)
3)
4)
5)
6)

Violations of emotions accompanied by changes in facial expressions and expressive movements

Hypermimia – _____

Amimia, hypomimia –

Paramimia – _____

Disorders of effector-volitional sphere

Disorders instinctive drives

1.
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4.

5.

6.

Disturbances of volitional motives

1.

2.

3.

4.

5.

Disturbances of attention

1.

2.

3.

Psychomotor disturbances

1.
-
-
-
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-
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2.
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Tests

1. A patient answering a question of the attending physician about his marital status long explains «features of dynamics of concept a family in a historical continuum». When the doctor repeatedly asked the same question, the patient has took offense, explained that he was divorced, but «it is such a trifle in Universal scale when there are phenomena of globalization and deleting of borders between the countries». What disorder of thinking is in the patient?

A. Obsessions
B. Overvaluable ideas
C. Delusional ideas
D. Paralogic thinking
E. Reasoning

2. A 65 years-old patient suffers from cerebral atherosclerosis. He complains of decrease of working capacity, impairment of memory, difficulties in performance of work demanding intellectual efforts. According to the patient's relatives, during last year progressive loss of knowledge and skills, lack of restraint of emotions are observed in the patient. Define disorder of intelligence in such case.

A. Lacunar dementia
B. Total dementia
C. Oligophrenia
D. Boundary intellectual backwardness
E. A variant of normal state

3. Depressive syndrome is characterized by all except:
A. Filing of sadness:
B. motor retardation
C. pseudohallucinations
D. Идеаторная заторможенность
E. Delusion ideas of self- humiliation.

Tasks

1. A girl tells to the friend what happened with her the night before. A friend declares in surprise, that exactly it took place with the heroine of film which they saw together last evening, but the girl categorically insists on her version. What disorder of memory does the girl have?

_____
_____
_____
_____

2. A 30 years-old patient is characterized by disorder of behavior, greatly elated mood. She sleeps only 2–3 hours a day. She is annoying and restless. The patient constantly offers the medical personnel to help. She prefers bright clothes and cosmetics. The patient's speech is accelerated, the voice got hoarse, she quickly changes a conversation theme and it's difficult to follow the patient's thoughts. What psychopathological symptoms present in this case?

_____
_____
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_____

3.The patient came to the clinic with mother. Reported that sick again in almost no sleep for a month. Very active, trying all the command and to lead, because of what is constantly in conflict with others. During the last week began bringing home casual acquaintances and give away their personal belongings, clothes. Always cheerful, singing, the house can not sit still. During the conversation he speaks loudly, easy to rhyme words,

rapidly switches from one topic to another, in connection with which it is inconsistent. He considers himself very clever and astute, faces doctor that unravel his plans, but it is contagious laugh. Qualify syndrome response justify:

_____
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DISTURBANCES OF CONSCIOUSNESS, SELFCONSCIOUSNESS. PSYCHOPATHOLOGICAL SYNDROMES

DISTURBANCES OF CONSCIOUSNESS, SELFCONSCIOUSNESS

Consciousness is an integrative sphere of the psychic activity, the highest form of reflecting the objective reality, a product of a long historical development. With appearance of the consciousness, the human being received an ability to isolate himself from the nature, cognize it and master it. The consciousness is realized by means of the language, the words which form the second signal system. The individual consciousness is formed in the process of the man's mastering socially produced representations, concepts and norms.

It is worth mentioning that there are physiological changes in the consciousness which appear in fatigue, during sleeping, in emotional-stressful situations.

Fatigue: a state of tiredness which appears after some physical or mental overstrains and is accompanied by a higher excitation threshold. Outwardly such a person looks inhibited, his responses to stimuli are delayed, the speech is meagre, the answers after a pause consist of one word. Some difficulty in the process of memorization is noticed, the attention is hardly attracted, the rate of thinking is delayed, the facial expression is not expressive, the person is apathetic. The state of fatigue does not require any drug treatment, it disappears spontaneously after some rest and sleep. Recollections of it are fragmentary, usually only of the strongest stimuli.

Sleep with dreams: it is a normal physiological state of man and animals, necessary for them as much as food; it is a manifestation of the instinct for self-preservation. Sleep is a functional state of the brain and the whole organism; it is characterized by an incomplete inhibition of the psychic activity and a reduced active cooperation with the environment. There are several theories for origination of the sleep and its functional significance. They are: the theory of a diffuse cortical inhibition, the anabolic theory considering the sleep as a state that facilitates renovation of energy stores in the brain and the organism at large; the information theory according to which during the sleep some information is fixed in the prolonged memory without processing. The sleep contributes to a valuable use of the acquired information and experience in the interests of the activity in which the person is involved in the state of wakefulness.

By their physiological manifestations, two phases of the sleep are distinguished: fast and slow. The moment of falling into the stage of the slow sleep is characterized by deceleration of the breathing and heart rate, reduction of the blood pressure and muscle tone. In the deep stage of the slow sleep the rates of respiration and pulse become slightly increased, while the general motor activity of the sleeping person becomes minimum, it is difficult to wake him at this moment.

During the fast sleep, the activity of the cardiovascular and respiratory systems is sharply intensified, the blood pressure becomes higher, the motor activity of the sleeping person increases, movements of the eyeballs become rapid thereby testifying that at this moment the sleeping person sees dreams. In people, the sleep is of a cyclic character. Each cycle consists of separate stages of the slow and fast sleep. The duration of one cycle is 1.5–2 hours, every night up to 3–5 cycles are observed. During a night the depth of sleep is not the same and depends upon individual peculiarities and the state of the organism. In some people an inhibition of the cerebral cortex develops rapidly and the deep sleep comes in the first half of the night, while in others, on the contrary, the sleep is at first superficial and later becomes deep. As a rule, the superficial sleep is accompanied by dreams. Dreams are imagery representations which appear at the time of sleeping and are perceived by man as reality. The contents of dreams reflects some past events and feelings of the person, as well as the information which precedes the sleep and perceived in a distorted form. The contents of dreams may be influenced by a possible direction before the sleep rather than only by light, smell and ambient temperature.

Physiologically, dreams are based on an incomplete inhibition of the cerebral cortex, some parts of which remaining disinhibited. A rapid change of dreams is caused by a chaotic state of the processes of excitation and inhibition. The ancient people were not absolutely wrong when they said about prophecy of dreams. Sometimes they really could have a foretelling character. At the onset of a disease, impulses from an affected area of the body sometimes may be so weak that they are not fixed

in the consciousness. In the state of sleep these impulses come to the cerebral cortex which is at the hypnotic phase, when weak external and internal factors are more significant than strong ones. Dreams in such cases are the first signals of a disease.

Besides, dreams are also characterized by activation of unrealized forms of the psychic activity. It may explain the known facts of scientific discoveries made in sleep (D.I. Mendeleev's discovery of the periodical table of elements).

From the viewpoint of physiology, dreams may be caused by the same material processes which are responsible for appearance of the psychic activity in the state of wakefulness.

Affectively narrowed consciousness, or ***the physiological affect****:* an emotional state which does not exceed the limits of the norm and is a short-term, swiftly and wildly passing emotional explosive response accompanied by sharp changes in the psychic activity (consciousness included), marked autonomic and motor manifestations. They are fragmentary recollections of dreams, a strong and short-term feeling in the form of anger, fury, horror, delight, despair without a loss of self-control. The physiological affect is an extraordinary response of the personality to exceptional circumstances. It is followed by a change of the psychic activity in the form of fragmentation of the perception, narrowing and concentration of the consciousness on the object which traumatizes the psyche. The vividly manifested signs of an emotional excitement (a change of the appearance, facial expression, pantomimics, voice) reflect physiological, biochemical shifts in the organism. Affective actions are notable for stereotypies, impulsiveness, a sharp reduction of the intellectual and volitional control, a disturbed ability to prognosticate possible consequences of one's own actions. Appearance of some forms of behaviour which were not peculiar to the subject before is one of the important signs of the physiological affect; here the behaviour comes in conflict with the basic life directions and value orientations of the personality, acquiring features of an involuntary and situational character.

All the syndromes of the cloudiness of consciousness have a number of common signs:

- Estrangement from the surrounding world. The real world, any events and changes that take place in it do not attract the patient's attention; even if they are perceived by him, it is only in a fragmentary and inconsistent way. The ability to realize and comprehend phenomena of the surrounding life is weakened or, sometimes, absolutely lost.
- Disorientation in one's own personality, place, time, situation, surrounding persons. Being one of the leading signs in any disturbance of consciousness, the allo- and autopsychic disorientation in each particular case has characteristic peculiarities in its structure, expressiveness and development.
- The thinking is sharply destroyed, the speech becomes fragmentary, inconsistent and incoherent.
- Disturbances of memory are observed. After a return from the state of a disturbances of consciousness, recollections are always incomplete, fragmentary, inconsistent, in some cases they are absent.

A practical task of any physician is to reveal a pathology of consciousness (an important mental process) and give qualified medical aid.

The consciousness is regarded as **clear** if the subject is able to orientate in his own personality, place, time, situation, surrounding persons and at the same time he has no disturbances in any mental sphere.

Disturbances of consciousness are classified in the following way:

1. Non-psychotic (non-productive) forms (disengagement of consciousness)
    1) Obnubilation
    2) Torpor
    3) Somnolence
    4) Sopor
    5) Coma

2. Psychotic (productive) forms accompanied by delirium, hallucinations, a disturbance in behaviour
    1) Delirious syndrome
    2) Oneiroid syndrome
    3) Syndrome of asthenic confusion
    4) Syndrome of perplexity

5) Amentia
6) Twilight state of consciousness

a) with outwardly regulated behaviour – a simple form (ambulatory automatism, somnambulism)
b) psychotic form
c) pathological affect
d) pathological intoxication
e) prosomniac state
f) "short-circuit" response
g) hysterical twilight states (puerilism, pseudodementia, Ganser's syndrome)

Disengagement of consciousness: a total disturbance of reflection accompanied by an instantaneous or consecutive reduction, and sometimes an absolute disappearance, of the scope and depth of the whole psychic activity. At first, the cognitive ability is narrowed and gradually decreased, the logic is disturbed; then it is accompanied by a disturbance in the sensual-imagery reflection of the surrounding reality that becomes deeper. It is followed by the dying away of the conditioned reflex activity of the organism. In the last turn, the unconditioned reflex functioning of the organism, which ensures the basic vital functions, is disrupted; as the functions are dying away, the death comes.

Torpor*:* a decrease in the clarity of consciousness down to its absolute disappearance with a simultaneous impoverishment of its contents. It is characterized by two main signs: a higher excitation threshold for all the stimuli and an impoverishment of the psychic activity. The patients do not respond if they are addressed in a low voice, common stimuli elicit only a weak orienting response (the patient may open his eyes, turn his head towards a voice), and only a strong stimulus may evoke an adequate but delayed response through speech, facial expression and motor activity. Such patients do not complain of any noise, they do not respond to other inconveniences (a damp bedding, a too hot heater, etc.), they are apathetic, the surroundings do not attract their attention, their facial expression is meaningless, the thinking is retarded and difficult. The speech is meagre, the answers consist of one word. The motor activity is reduced, the movements are slow and awkward. Some impoverishment in the facial expression responses is observed. Disturbances in the memorization and reproduction are marked, the patients look as if they dozed. Usually, the period of torpor is absolutely or almost absolutely forgotten.

Depending upon the extent of a decrease in the clarity of consciousness, the following stages of torpor are distinguished:

– obnubilation;
– somnolence;
– sopor;
– coma.

Obnubilation*:* "a veil on consciousness", "a cloud on consciousness"; it is characterized by twinkling in the clarity of consciousness. The patients' responses, first of all speech ones, are delayed, the patients develop absent-mindedness, inattention, mistakes in answers. Some carelessness of the mood is observed. Such patients resemble a person in a state of a mild alcoholic intoxication. The duration of obnubilation ranges from a few minutes to several months. It is observed in intoxications, brain injuries, voluminous processes in the brain, progressive paralysis, infectious diseases, vascular pathologies.

Somnolence: a deeper extent of torpor, the state of half sleep when during a greater part of the time the patient lies with closed eyes. The phrase speech is absent, but the patients are able to give their answers to simple questions, the answers consisting of one word. More difficult questions are not comprehended. Adynamia is expressed.

Sopor means pathological sleep. The patient lies motionless, his eyes are closed, there is no expression on his face. Any verbal contact with the patient is impossible, orientation is absent, activity of the second and first signal systems is discontinued. Adynamia reaches the extent of the absolute immobilization, but some undifferentiated stereotyped defense motor and, sometimes, vocal responses. The pain, cough, corneal, pupillary, vomiting and swallowing reflexes are preserved. A return from sopor is accompanied by the absolute amnesia.

Coma is the deepest extent of the disengagement of consciousness. It belongs to extreme states. Only vital functions of the organism (cardiac and respiratory activities, vascular tension and thermal

regulation) are preserved. Conditioned reflexes die away, pathological ones develop. As the coma deepens, the cardiac activity, vascular tension and thermal regulation are affected, pathological forms of respiration appear. If no urgent aid is given, the outcome is lethal.

***Cloudiness of consciousness**:* this term embraces disturbances in which there is a total disintegration of the whole psychic activity consisting in a qualitative change of the contents of consciousness. These disturbances are polymorphous by their structure and, besides different variants of disorientation, include psychopathological symptoms, where the leading ones are hallucinations, delusions, false recognitions, emotional and motor excitement, disturbances of memory. In cases of cloudiness of consciousness, the latter reflects a world of morbid feelings rather than the objective reality.

THE SYNDROMES ON THE TOPIC "DISTURBANCES OF CONSCIOUSNESS, SELFCONSCIOUSNESS." SEE CLASS № 3.

THE PSYCHOPATOLOGICAL SYNDROMES

The psychopathological syndrome is a more or less stable totality of symptoms pathogenetically connected with one another.

Revealing of the leading syndrome (syndromological diagnosis) is the initial stage of the diagnostic process which is of a great practical significance. There are various classifications of syndromes: by the preferential disruption of some mental function, by the depth of the impairment of the personality, etc.

The classification of psychopathological syndromes with regard for registers of mental disorders, reflecting the depth of the impairment of the personality, is the one which most completely satisfies requirements of assessing the depth of mental disorders and indications for various kinds of therapy.

The *psychotic state* is characterized by presence of at least one of the following signs: clouding of consciousness, delusions, hallucinations. In this situation the patient cannot critically assess his diseased state and does not understand the morbid character of the disturbances.

Nonpsychotic (borderline) mental disorders are mostly characterized by disorders of emotions and in the effector-volitional sphere. The patients critically assess their diseased state, understanding that they are ill.

Defect-organic disorders manifest themselves through disrupted intellectual functions (of memory and thinking).

Classification of psychopathological syndromes

I. Nonpsychotic, borderline syndromes:

1. Asthenic (asthenoneurotic, asthenodepressive, asthenohypochondriac, asthenoabulic).
2. Apathoabulic.
3. Neurotic and neurosis-like (neurasthenic, the syndrome of obsessive states, dysmorphophobic, depressive-hypochondriacal).
4. Psychopathic and psychopathy-like.

II. Psychotic syndromes:

1. Syndromes of a cloudiness of consciousness
    a) asthenic confusion
    b) perplexity
    c) delirious
    d) amentia
    e) oneiroid
    f) twilight state of consciousness
2. Depressive (psychotic variant)
3. The syndrome of hallucinosis (verbal, tactile, visual)
4. The syndrome of derealization and depersonalization
5. Maniacal
6. Paranoid (including hallucinatory-paranoid, hypochondriac, dysmorphomanic, Kandinsky-Clérambault syndrome of psychic automatism)
7. Paranoiac
8. Paraphrenic
9. Hebephrenic

10. Catatonic

III. Defect-organic syndromes:

1. Psychoorganic (explosive, apathetic, euphoric variants)
2. Korsakoff's amnestic
3. Oligophrenia
4. Dementia (total and lacunar)

The asthenic syndrome (Greek: a – absence, stheno – strength) manifests itself by a marked physical and mental tiredness which appears even after some insignificant exertion. The patients have a difficulty in concentrating, therefore they memorize poorly. They develop a lack of emotional restraint, lability, an increased sensitivity to sounds, light, colours. A rate of thinking is delayed, the patients experience difficulties in solving complex mental tasks.

In **asthenoneurotic states**, the above phenomena of asthenia are accompanied by a hot temper, an increased irritability, tearfulness, capriciousness.

In **asthenodepressive states**, the phenomena of asthenia are accompanied by depression.

In the **asthenohypochondriac syndrome**, the asthenic symptoms are accompanied by an increased attention to one's own physical health; the patients pay much attention to various unpleasant sensations coming from their internal organs. It is not in rare cases that they develop thoughts about presence of some incurable disease.

In the **asthenoabulic syndrome,** the patients, who begin some work, get tired so quickly that actually are not able to fulfill the simplest tasks and actually become inactive.

The asthenic syndrome in its different variants is observed in all somatic exogenous-organic, psychogenic diseases.

The **apathoabulic syndrome** is characterized by a reduced strength of emotions, indifference to what is going on around and to the self in combination with an absence of any motives to activity. Such patients would usually lie or sit, doing nothing. They are slovenly and inert. It is observed in organic lesions of the brain and schizophrenia.

The **neurotic syndrome** is a symptom-complex that includes phenomena of instability in the emotional and volitional spheres with an increased mental and physical exhaustibility, with a critical attitude to one's own state and behaviour. Depending upon peculiarities of the personality, it may be of the neurasthenic, hysterical and obsessive-phobic character.

The **neurasthenic syndrome** (the syndrome of irritable weakness) is characterized, on the one hand, by an increased excitability, unrestrained affect, an inclination to wild affective responses with volitional instability, and, on the other hand, by an increased exhaustibility, tearfulness, a weak will.

The **hysterical syndrome** is characterized by an increased emotional excitability and lability, theatrical behaviour, an inclination for dreaming and falsity, to wild affective responses, fits of hysteria, functional paralyses and pareses, etc.

The **syndrome of obsession (the obsessive syndrome)** manifests itself by annoying thoughts, phobiae, obsessive desires and actions. As a rule, the phenomena of obsession appear suddenly, they do not correspond to the contents of the patient's thoughts at this moment, his attitude to them is critical and he struggles with them. The syndrome of obsession occurs in neuroses, somatic and exogenous-organic diseases of the brain.

The **dysmorphophobic syndrome:** the patients overestimate significance of the deformities they have, actively search for aid of specialists, demand making cosmetic operations on them. Most frequently it develops at puberty by the psychogenic mechanism. For instance, if juveniles are sure that they have some overweight, they strictly limit their food (psychic anorexia).

The **depressive-hypochondriacal syndrome** is characterized by appearance of thoughts in the patient about presence of some serious or even incurable disease, they being accompanied by low spirits. Such patients would persistently search for aid from doctors, demand various examinations, administration of some drug therapy.

Psychopathic and psychopathy-like syndromes are symptom-complexes of emotional and effector-volitional disturbances, which are of a more or less stable character and cause the main type of neuromental responses and behaviour, usually insufficiently adequate to the real situation. They include an increased emotional excitability, inadequacy of voluntary actions and acts, an increased irre-

sistibility to instinctive drives. Social dysadaptation of such patients is conditioned by their personality disharmony.

Depending upon peculiarities in the type of the higher nervous activity and conditions of upbringing, it is possible to observe the asthenic, hysterical, psychasthenic, irritable, paranoiac or schizoid variants of the psychopathic syndrome; they are the basis of various forms of psychopathy and psychopathy-like states of the organic and other origin. They are often accompanied by sexual and other perversions.

The psychopathic syndrome develops by the moment of formation of the personality (by 18–20 years).

The psychopathy-like syndrome develops in the people, who were harmonious before, under the influence of exogenous-organic lesions of the brain.

Cloudiness of consciousness – disturbances in which there is a total disintegration of the whole psychic activity consisting in a qualitative change of the contents of consciousness. These disturbances are polymorphous by their structure and, besides different variants of disorientation, include psychopathological symptoms, where the leading ones are hallucinations, delusions, false recognitions, emotional and motor excitement, disturbances of memory.

The syndrome of asthenic confusion is accompanied by some "twinkling" in the clarity of consciousness, an expressed exhaustibility of psychic processes, an increasing cloudiness of consciousness by the evening. In the beginning of a conversation, as a rule, the patients are still able to answer questions, later their speech becomes inarticulate, "muttering", a contact with the patient is affected. No delirium and hallucinations are observed. The syndrome of asthenic confusion may develop in infectious diseases, more frequently it is typical for children and juveniles. In case of an unfavourable development of a prior disease, the syndrome of asthenic confusion may turn into delirium or amentia.

The syndrome of perplexity ("affect of bewilderment") is characterized by a disturbance of self-consciousness, cognition and adaptation to the surroundings. The patients are helpless, their facial expression is bewildered, the look is roving, the movements and answers to questions are uncertain, questioning and inconsistent, interrupted by silence. Sometimes the patients ask to explain what is going on with them and around. The perplexity is indicative of a relatively superficial disturbance of the psychic activity, when awareness of one's own change is preserved. This perplexity develops in case of a sudden, inexplicable and unusual change in what is going on around or within the patient himself, and may manifest the initial stage of developing delirious, depressive and other syndromes. Often the structure of the syndrome includes symptoms of depersonalization and derealization. It occurs during output from a coma, and in case of paranoid syndrome.

The delirious syndrome is the most frequent form of a cloudiness of consciousness, accompanied by an influx of vivid visual hallucinations and illusions, delusions, and a changeable affect where some fear and alarm prevail. The patients are characterized by motor excitement, their orientation in place and time is disturbed, but in the self is preserved. A delirious cloudiness of consciousness gradually increases and its first signs become clear usually by the evening: the speech, facial expression and motor responses become animated and accelerated, some general excitement and anxiety develop. The patients are garrulous, inconsistent in their statements, their movements acquire an exaggerated expressiveness. The mood is changeable, the sleep is superficial, interrupted and accompanied by vivid, often nightmarish, dreams, alarm and fears. In the morning, the patients feel weak and jaded. Later, against a background of intensification of the above disturbances, there is appearance of visual illusions changing into hallucinations at the moment of falling asleep, a distinction between the sleep and reality is obliterated. It is followed by a further increase of the symptoms with development of real visual hallucinations. In some cases it is impossible to reveal any concrete plot in the contents of the visual hallucinations and apparitions change one another without any relation between them, while other cases are characterized by appearance of consecutively changing scenes which are connected by their contents. Depending upon the etiological factor, visual hallucinations may have their own peculiarities. Thus, delirium tremens is characterized by presence of animals in morbid feelings; in people who received a brain injury in a tactical situation, subjects of war episodes prevail. In delirium, the patient is an active participant in his morbid feelings, his emotional state and acts correspond to the contents of what he has seen, he is seized with bewilderment, curiosity, fear and horror, at the same time

he may run, hide, defend himself. The speech excitement is often limited to short phrases, words, cries. In the period of an extensive delirium, some auditory, tactile and olfactory hallucinations, as well as delusions, may develop. The night period is characterized by either absolute insomnia or superficial interrupted sleep which comes only by the morning. In the first half of the day the symptoms of delirium may be significantly or absolutely reduced with predominance of asthenia, in the second half of the day the psychosis recommences again. It is possible to periodically observe so-called light gaps lasting up to an hour. At this time, the hallucinations disappear absolutely or partially, the correct orientation in the surroundings appears, the patients realize that the previous disturbances resulted from a disease, a critical assessment of his own state by the patient may be observed. Sometimes a morbid state may develop very rapidly, it occurring in cases of poisoning with tetraethyl lead, atropine, an antifreeze substance. An unfavourable course of a prior (somatic, infectious) disease may entail development of grave forms of delirium: occupational and muttering.

Occupational delirium is a delirium with predominance of a monotonous motor excitement in the form of usual actions made in everyday life (having meals, doing premises) or directly related to the patient's occupation (sewing, work with a cash register). The motor excitement takes place, as a rule, in a limited space (a bed). Usually, there are no light gaps, a verbal contact is more frequently impossible.

Muttering delirium (delirium mussitans), quiet delirium: a delirium with an uncoordinated motor excitement which is deprived of any integral actions and takes place within the limits of a bed. The patients would shake off something, feel with their fingers, "gather". It is impossible to come into any contact with such patients, an absolute estrangement from the surroundings is observed, the speech excitement is in the form of some low inarticulate muttering. Usually muttering delirium is followed by occupational one; moreover, these two states may be aggravated by torpor, that is a bad prognosticating sign. Severe forms of delirium may be accompanied by neurological disturbances: tremor, ataxia, nystagmus, hyperreflexia, rigidity of the occipital muscles, etc., rather than by autonomic ones only. As the state deteriorates, dehydration of the organism increases, blood pressure reduces, therefore a collapse may develop, there is a marked hyperthermia of the central origin. A return from delirium is usually made through a severe asthenia, real events are forgotten, only recollections of morbid feelings are preserved. Severe deliria end with formation of the psychoorganic syndrome. A transfer of delirium into amentia is possible.

Delirium is observed in infectious and acute somatic diseases, intoxications (alcoholic, caused by narcomania and toxicomania), vascular diseases of the brain, brain injuries.

Amentia is a form of a cloudiness of consciousness with prevalence of an incoherence of speech and motility, and perplexity. The patients' speech consists of some words, syllables and inarticulate sounds pronounced in a low, loud or singing voice. The patients' mood is changeable: now it is depressed-anxious, now indifferent, now slightly high with some features of delight. A motor excitement in amentia is usually within the limits of a bed. It is confined to some separate movements which do not form a finished motor act: the patients fidget, make rotatory movements, bend, start, throw aside their extremities, sprawl in bed. Sometimes a motor excitement may be followed by stupor. Any verbal intercourse with the patients is impossible. Their thinking is incoherent, the facial expression is bewildered. The patients are perplexed and helpless. At night, amentia may change into delirium; at daytime, in aggravation of amentia, torpor develops. Amentia lasts several weeks. The period of a cloudiness of consciousness owing to amentia is absolutely forgotten. A return from amentia takes place through a severe and long asthenia. Formation of the psychoorganic syndrome with an intellectual-mnestic reduction is possible. Amentia is observed in severe somatic, infectious and noninfectious diseases, more seldom in intoxications, at an acute period of epidemic encephalitis.

The oneiroid syndrome is a cloudiness of consciousness with an influx of some spontaneously developing fantastic representations; they contain modified fragments of what has been seen, heard, experienced and read, but they whimsically get entangled with distortedly perceived details of the surroundings; the appearing pictures (visions) are notable for their resemblance of scenes and dreams.

Development of an oneiroid is gradual and goes through a series of successive stages:

The initial period determined by affective disorders. Depressive states are accompanied by listlessness, irritability, unmotivated alarm, loss of strength. Maniacal states carry an imprint of enthusiasm, touchingness, feelings of emotion and enlightenment. The above disorders are accompanied by

disturbances of sleep and appetite, headaches, discomfort in the heart region. This stage may last from several weeks to several months.

The stage of delusional mood – the surroundings seem to the patient as something incomprehensible, changed and full of an ominous meaning. Either some uncontrolled fear or foreboding of an inevitable evil, sometimes madness or death, appears. It seems to the patient that he is persecuted, that he is seriously ill, he develops perplexity, a delirious orientation in the surroundings, inadequate acts. At the same time he has a sensation that something, some action is taking place around him, like in the cinema or theatre, and the patient is a participant at one moment and a spectator at another; a transformation of some people into other ones is taking place. Periodically, a psychomotor excitement or inhibition may be observed. These symptoms tend to increase and may last up to several weeks.

The stage of an oriented oneiroid – real events occurring around the patient acquire some fantastic contents. The perplexity may be accompanied by a psychomotor excitement or substupor, when the patients feel fear and may be in the state of depression.

The stage of an extensive oneiroid – the patient's consciousness is characterized by predominance of fantastic representations connected with the inner world of the patient. They are based on visual hallucinations, and before the patient's "inner eye" pass scenes of immense situations, where he is the main character of the events which take place. Gradually, motor disorders in the form of stupor develop, the patients become speechless, no verbal contact with them is possible.

Reduction of the symptoms of an oneiroid is gradual, in the reverse order of their appearance. Memory to morbid feelings is partially preserved, but real events are forgotten. There are two forms of oneiroid: endogenous (in schizophrenia) and exogenous-organic (invascular, somatogenic psychoses, delirium tremens, senile psychoses, at a remote period of brain injuries).

Twilight state of consciousness – a sudden loss of the clarity of consciousness with an absolute estrangement from the surroundings lasting from several minutes to several days. By its clinical manifestations, the twilight state of consciousness is subdivided into a simple and psychotic forms without any distinct borders between them.

The simple form develops suddenly, the patient is disengaged from the reality. It is impossible to enter any verbal contact with him, the speech is either absolutely absent or may consist of some words or short phrases which are often repeated. The movements are delayed and impoverished up to the development of a short-term stupor changing into episodes of an impulsive excitement. Sometimes an outwardly purposeful activity may be preserved. The patients may cover long distances, using transport, cross streets where it should be done, etc. In this case, the term of "ambulatory automatism" is used. The ambulatory automatism, which appears in sleep, is called somnambulism, or lunacy. The simple form of the twilight state of consciousness may last several minutes or hours and is accompanied by absolute amnesia.

The psychotic form of the twilight state of consciousness is accompanied by hallucinations, delirium and a change of mood. In morbid feelings, visual hallucinations with frightening contents prevail: a car, train or airplane rushing at the patient, collapsing buildings, approaching water, pursuit, etc. Auditory hallucinations are often deafening: explosions, tramp, thunder; olfactory ones have unpleasant contents too: a smell of burning, urine. Common delusions, as a rule, are persecution and physical annihilation, religious-mystic delusions also occur. These feelings are accompanied by wild emotional disturbances in the form of fear, frenzied anger or fury. A motor excitement is most often in the form of senseless destructive actions directed at the surrounding people. The patients' words and actions reflect morbid feelings existing at this moment. After restoration of consciousness the whole period of morbid feelings is absolutely forgotten. The twilight state of consciousness is most frequently observed in epilepsy and traumatic lesions of the brain.

Besides, in the forensic medical practice, so-called **exclusive states** are found: a group of acute short-term disturbances in the psychic activity with various etiology and similar clinical signs. These disturbances begin suddenly in connection with an external situation, they are short-term, accompanied by a disturbance of consciousness and an absolute or partial amnesia. Exclusive states develop in the persons suffering from mental diseases and, as a rule, are a single episode in their life.

The exclusive states include: pathological affect, a pathological prosomniac state, a "short-circuit" response and pathological intoxication.

The purposefulness and clinical necessity of isolating exclusive states into a separate group are confirmed by the practice of forensic medical examinations. The experts are often asked a question about the mental state of the subject at the moment of accomplishing some socially dangerous actions. Therefore the substantiation of the very concept of "exclusive state" and the establishment of diagnostic criteria were made in compliance with legal norms: the problems of responsibility and irresponsibility.

Clinical manifestations

The cardinal sign of all exclusive states consists in their psychotic nature. A leading place in their clinical picture is occupied by a disturbance of consciousness with disorientation, an absolute isolation from the reality and a morbidly distorted perception of the surroundings. A profound disorientation in the surroundings is accompanied by preservation of complex interrelated automatized actions. The behaviour in the twilight state of consciousness is conditioned by an imagery delirium, hallucinations, a strained affect of fear, anger, melancholy and fury, they determining socially dangerous actions. A subsequent amnesia both spreads to real events and often involves subjective feelings.

Exclusive states may be observed in actually healthy persons. But case histories of the majority of people who had an exclusive state reveal smooth residual organic changes whose etiology contains injuries, infections or intoxications. In some cases one cannot exclude a part played by some constitutional predisposition, epileptic in particular. An especially great part is played by asthenia, an exhausting effect of some preceding stress and overexcitement, as well as insomnia.

Thus, a preliminary preparation of the ground is made by a number of pathogenic factors. They determine a functional state of the nervous system by the moment of action of the stimulus which causes an acute psychotic disturbance. A lot of accidental relieving factors in uncommon and rare combinations take part in the appearance of such a temporary predisposition, it may be an explanation for an extraordinary rarity of exclusive states and a little probability of their repeated development in the same person.

Pathological affect is a short-term psychotic state, whose sudden appearance is caused by factors which traumatize the psyche. It is possible to isolate three phases in the clinical picture of the pathological affect.

First, preparatory. In connection with the factors which traumatize the psyche (offence, insult), an emotional tension is growing, a perception of the surroundings is changed, a capacity for observing what is going on, for assessing the situation and realizing one's own state is impaired. The consciousness is limited by a narrow circle of representations directly connected with the traumatizing feeling, all the rest is not perceived.

Second, the phase of explosion. A tense affect of anger or frenzied fury instantaneously reaches its culmination, is accompanied by a deep cloudiness of consciousness with a sharp elevation of the threshold of perception and an absolute disorientation. At the height of a disturbance of consciousness, some illusory representations and functional hallucinations are possible. An emotional discharge is manifested by a wild motor excitement with automatic actions, a senseless aggression and destructive tendencies. They all are accompanied by a marked mimic and autonomovascular response: the face gets sharply reddened or becomes unusually pale. The features are distorted, an excessively expressive facial expression reflects mixing of various emotions, anger and despair, fury and bewilderment. The state achieves its maximum tension.

Third, the concluding phase. It is accompanied by a sudden exhaustion of the physical and mental strength. Deep, irresistible sleep comes. In some cases, instead of the sleep, there prostration (general weakness, listlessness, an absolute apathy and indifference to the surroundings and what has been made).

Clear clinical criteria for diagnosing the pathological affect are of a paramount significance because of a necessity to differentiate it from the physiological affect, as different crimes, particularly against the personality, are often committed in a state of some mental excitement.

The main clinical distinction of the pathological affect is a disturbance of consciousness with a disengagement from the reality, its distorted perception, a limitation of consciousness to a narrow circle of representations, directly connected with an actual stimulus. The psychotic nature of the pathological affect is also manifested in a regular change of the phases which are traced despite an extraordinary acuteness of this state.

Pathological prosomniac states; before they were described as “sleep intoxication”. Most authors emphasized a rate of aggressive actions made in such states.

A pathological prosomniac state should be understood as a state of an incomplete awakening after the deep sleep with an uneven transition of some systems of the brain from sleep to wakening. After “awakening” of simpler motor functions the higher mental ones (consciousness, first of all) remain in the state of sleep inhibition. Such an uneven, delayed transition from sleep to wakening is accompanied by cloudiness of consciousness and a deep disorientation. The continuing dreams may be vivid, imagery, frightening. Some distortedly perceived real events are interspersed into a frightening dream and combined with illusory or even short-term hallucinatory-delirious feelings.

The motor functions, released from the sleep inhibition, make the subject capable for aggressive-defensive actions. They are manifested in the form of either automatic acts or integral motor acts reflecting pathological feelings. It is not rarely that persons in prosomniac states commit murders and inflict grave bodily injuries. The period of excitement is usually followed by a final awakening with a complete regain of consciousness and a subsequent adequate response of perplexity and surprise at what has happened. After the final awakening, no recollections of the morbid state are usually left. In some cases, they are partially preserved, mainly concerning dreamy images. Sometimes prosomniac states last only a few moments, but in some cases take more time.

Usually, prosomniac states appear in persons with feebly marked organic changes in their central nervous system, more frequently of a traumatic origin, as well as in the people whose sleep is deep and sound. Side by side with this, significantly important in the genesis of pathological prosomniac states is a complex of temporary hazards which produced their effect prior to falling asleep. The first place among them belongs to the use of alcohol. A pathogenic role of a preceding emotional strain, overstrain, forced sleeplessness and somatopsychic asthenization was also noticed.

The “short-circuit” response. Such a pathological response develops owing to a protracted situation, which traumatizes the psyche, and as a result of a discharge of some long and intensive affective strain accompanied by anxious apprehensions and expectation of troubles, on which almost all the representations of the subject are concentrated. A socially dangerous action, which was not intended before, is caused by an instantaneously formed and often absolutely accidental situation. The clinical picture is determined by either a disturbance of consciousness or sharply marked affective disturbances (frenzied rage, despair, etc.) which do not correspond to their cause and are accompanied by impulsive, automatic actions, including those ones which are dangerous for the surrounding people. Like after the pathological affect, the “short-circuit” response is followed by sleep or a sharp psychophysical exhaustion.

Pathological intoxication is a twilight cloudiness of consciousness with various structure; it is belongs to a group of acute short-term mental disorders.

Pathological intoxication is characterized by a sudden development of a sharp change of consciousness, like the twilight one; it qualitatively differs from “clouded” consciousness or torpor in a common alcoholic intoxication. A person with pathological intoxication perceives the surrounding reality in a morbid way, the external situation becomes threatening to him. It is accompanied by alarm, fear, sometimes reaching uncontrolled horror. In the state of pathological intoxication it is possible to observe animation of some dangerous situations from the past, a pathological reproduction of a number of events from some books read before and their transfer to the reality imagined. In such cases, an ability to make rather complex purposeful actions, use transport, find a correct road, etc., is usually preserved. But most frequently a subject, who is in the state of a changed consciousness, is pathologically disorientated, unable to have any speech intercourse with the surrounding people, always acts alone, any combined actions in such cases are impossible. The speech production in pathological intoxication is extremely meagre, and even if it is available it always reflects aspects of morbid disorders. A person in this state usually does not respond to any real stimuli, does not answer any questions, his attention cannot be attracted.

The acts made in pathological intoxication do not result from real motives and real circumstances, but at the same time they rarely are chaotic disorderly actions. Such acts are always based on morbid impulses, motives, representations. Forced actions are of a particular character, defensive for the subject; they are usually directed at elimination of an imagined danger.

In pathological intoxication, as a rule, the nervous-mental mechanisms, regulating complex automatized skills, equilibria and actions, associated with motor processes, are little involved. Often it contributes to making exceptionally adroit, complex and quick actions directed at realization of morbid motives.

Pathological intoxication ends as suddenly as it begins. Sometimes it turns into sleep, followed by an absolute amnesia or a dim recollection of what has been felt.

Besides the above forms of the twilight cloudiness of consciousness, there may be "twilight" which can be defined as hysterical. They develop after psychic traumas, and the patients' behaviour reflects the contents of the psychic trauma. The most frequent forms of the hysterical twilight cloudiness of consciousness are puerilism, pseudodementia, Ganser's syndrome.

Puerilism appears most often in a situation of a threat for an act made. The patient's behaviour clearly reveals some "age-related regression of the personality" with features of infantile behaviour: addressing official persons as "uncles" and "aunts" with an attempt to climbing up to their lap, the babbling speech, crawling on all fours, etc. At the same time, some acquired habits of an adult are observed (smoking).

Pseudodementia: a twilight state of consciousness with incorrect forms of behaviour and a vivid demonstration of dementia. The patients are not able to follow the simplest instructions, at the same time fulfilling more complex tasks.

Ganser's syndrome: a twilight state of consciousness when the patients answer beside the point of the question asked ("miss-talking**",** "miss-speech"), but the patient's answer always exists in the context of a conversation with him.

The above forms of psychosis may last several days and be accompanied by a total amnesia.

The depressive syndrome is characterized by a depressive triad: a depressed, sad and melancholic mood, a delayed thinking and a motor inhibition. Expressiveness of the above disorders is various. The range of hypothymic disturbances is wide: from mild depression, sadness and disappointment to a deep melancholia when the patients feel some heaviness, a pain in the chest, lack of any prospect, uselessness of their existence. Everything is perceived in dark colours: the present, the future, the past. In some cases the melancholia is perceived as a painful physical sensation in the region of the heart, some "precardiac melancholia" in the chest, rather than as a mental pain only.

Inhibition in the association process is demonstrated by an impoverishment of thinking; there are scant thoughts, they flow slowly and are confined to unpleasant events (diseases, ideas of self-condemnation). No pleasant events are able to change this direction of the thoughts. Answers to questions in such patients consist of one word, often there are long pauses between the question and the answer.

Motor inhibition manifests itself in delayed movements and speech, the speech is low and slow, the facial expression is sorrowful, the movements are delayed, monotonous, the patients may remain in the same posture for long periods. In a number of cases, motor inhibition achieves absolute immobility (depressive stupor).

The psychotic variant of the depressive syndrome is characterized by delusions of self-condemnation, self-humiliation, sinfulness and culpability which may make the patient think about suicide.

The depressive syndrome is usually accompanied by some expressed autonomosomatic disturbances: tachycardia, unpleasant sensations in the heart region, fluctuations in the blood pressure with a tendency to hypertension, disturbances in the gastrointestinal tract, loss of appetite and body weight, persistent constipations, endocrine disorders.

In recent years, physicians often reveal so-called "latent", "masked" depressions in their patients, where expression of the emotional component of the depressive syndrome is insignificant and somato-autonomic disturbances prevail.

"Masks of depression" may have various clinical forms.

1. *"Masks" in the form of psychopathological disorders:* anxious-phobic (a generalized anxious disorder, anxious doubts, panic attacks, agoraphobia), obsessive-compulsive (obsession), hypochondriac, neurasthenic.

2. *"Masks" in the form of a disorder of the biological rhythm:* insomnia, hypersomnia.

3. *"Masks" in the form of autonomic, somatic and endocrine disorders:* the syndrome of autonomovascular dystonia, vertigo, functional disturbances of the internal organs (the syndrome of hyperventilation, cardioneurosis, the irritable colon syndrome, etc.), neurodermitis, skin itching, anorexia, bulimia, impotency, disorders of the menstrual cycle.

4. *"Masks" in the form of algiae:* cephalgia, cardialgia, abdominalgia, fibromyalgia, neuralgia (of the trigeminal and facial nerves, intercostal neuralgia, lumbosacral radiculitis), spondylalgiae, pseudorheumatic arthralgiae.

5. *"Masks" in the form of pathocharacterological disorders:* disturbances of drive (dipsomania, narcomania, toxicomania), asocial behaviour (impulsiveness, disputability, fits of aggression), hysterical responses.

When diagnosing "latent depressions" it is necessary to take into consideration such their symptoms as:

1. The highest manifestation of the subjectively unpleasant feelings is in the morning.
2. Polymorphism, indefiniteness, abundance of persistent somatoautonomic complaints which exceed the limits of a certain disease.
3. Disruption of the vital functions (sleep, appetite, menses, potency, loss of weight).
4. Periodicity of the disorders, their spontaneous appearance and disappearance.
5. Their seasonal character (most frequently in spring and autumn).
6. Application of different methods of investigation does not reveal any concrete somatic disease.
7. Absence of the effect of somatic therapy.
8. The patient is treated by doctors of different specialities for a long period of time, persistently and without any result, but despite failures in the treatment he persistently goes on visiting doctors.

A generalized anxious disorder is manifested by complaints about some internal stress, alarm, foreboding of some imminent trouble, but they are not connected with any definite circumstances. It is characterized by anxiety and restlessness, difficulties in concentration, muscular tension, tremor, various autonomic disturbances.

A panic disorder: an episodic paroxysmal alarm which appears suddenly, mostly at night, with fits of a painful alarm and the fear of death, a sensation of a lack of air, tachycardia, nausea, sensations of numbness in the extremities, fever or cold, cold sweating for up to one hour or even longer.

Phobiac disorders: periodically appearing fits of fear which have concrete sensual contents: a sudden cardiac arrest, loss of consciousness, accident, etc., where a psychological defence against a conflict of the personality unrealized by the patient is manifested. The fits may be timed to a certain situation: being alone, in a close space, in a crowd of people, when crossing a street, going in the public transport, etc., but they rarely take place in medical establishments, in presence of a physician. They are accompanied by autonomic signs.

Syndromes of hallucinosis (visual, auditory, tactile, etc.): an imaginary perception of images without any real stimulation of the corresponding analyzer, without a delusive interpretation of hallucinations, with or without a critical attitude.

The syndrome of an improper body scheme: psychosensory intero- and proprioceptive disorders in the form of a distorted perception of the corporal "ego"; it manifests itself in the sensation of elongation, shortening, bending of the extremities, head, internal organs, etc. It is in the structure of the syndrome of depersonalization.

Depersonalization: sensations of changes in the mental and/or physical, corporal "ego". The patient feels all his body or its part estranged, there is estrangement of mental processes (thinking, behaviour).

Derealization: a sensation of a change in the surroundings (remoteness, illusiveness, dimness) is perceived as an unusual state, accompanied by unpleasant feelings, often in combination with phenomena of depersonalization. It is observed in depression, schizophrenia. Here the orientation in the surroundings is not disturbed.

The maniacal syndrome is characterized by the maniacal triad: euphoria (inadequately high spirits), acceleration of associative processes, and a motor excitement with a yearning for activity.

Typical for the maniacal syndrome is distraction; for this reason the patients are not able to complete what they began to do, consistently offer their anamnestic information. Despite the fact that the patient talks with his physician willingly and without a stop, this conversation is fruitless, as the

patient distracts to various external events or associations which appear in him. Usually these associations are of a superficial character.

Patients in the maniacal state usually do not produce any somatic complaints, they feel a fresh surge of physical strength rather than "high spirits" only. In this state they are inclined to overestimate their abilities and opportunities. The sexual drive may be intensified, the patients would easily come into contacts, strike up sexual acquaintances, marry, give empty promises.

Mild variants of maniacal states are customarily termed as hypomaniae.

Different variants of the maniacal syndrome are observed in the bipolar affective disorder, as well as in schizophrenia, protracted symptomatic psychoses, after brain injuries, in progressive paralysis.

The paranoid syndrome is characterized by presence of unsystematized delusions with various contents in combination with hallucinations and pseudohallucinations. An imagery delirium, most frequently the delusion of persecution, appears acutely and is notable for a variety of its plot, vividness and a large scope. The patients are anxious and uneasy, they feel fear, sometimes they are confused. More frequently, their behaviour is passive-defensive. It is observed in exogenous, psychogenic psychoses, schizophrenia.

Kandinsky-Clérambault syndrome is a variety of the paranoid syndrome and characterized by phenomena of psychic automatism manifested in such forms as ideational (somebody guides the thoughts), motor (the patient's movements are directed by a strange force) and emotional ("they make the mood","they excite joy, sorrow, fear, delight"). Pseudohallucinations (most frequently auditory), delusions of influence, mentism, symptoms of openness of thoughts (feelings that the patient's thoughts are understood by the surrounding people) and putting of thoughts (a sensation that the patient's thoughts are somebody else's ones transmitted to him) are observed here. It is not in rare cases that the patients have a sensation that in their heads their own or somebody else's thoughts are heard or there is their forced interruption. Sometimes delusions of influence spread to the patient's relatives or acquaintances rather than to the patient only, in such cases the patients are sure that not only themselves but other people also are under somebody's influence. It is most typical for schizophrenia.

The paranoiac syndrome is characterized by presence of a systematized delirium with absence of disturbances in perception and psychic automatisms. The delusions are based on real facts, but the patients' ability to explain logical relations between phenomena of the reality is impaired, the selection of facts is one-sided, according to the plot of the delusion. It is not in rare cases that during a long period the patients try to prove their case, lodge complaints, bring actions, become "persecutors of their persecutors", that may be socially dangerous to some extent. It is observed in schizophrenia, presenile and reactive psychoses, alcoholism.

The paraphrenic syndrome is a combination of a systematized or unsystematized delirium with psychic automatisms, verbal hallucinations, confabulatory sufferings with fantastic contents, a tendency to high spirits. Most of all it is typical for the late stages of schizophrenia.

Cotard's syndrome is characterized by a combination of hypochondriac delirium with delusions of grandeur against a background of a melancholia mood. The patients develop delusions of damage, death, destruction of the world, self-condemnation for perpetration of grave crimes; typical are statements that their "intestines have rotten", they "have no heart", the patients may believe that they died long ago and now are being decomposed. Most frequently, Cotard's syndrome is observed in involutional depression.

The dysmorphomaniac syndrome is characterized by a triad of signs: delusions of deformity and reference, depression. The patients actively strive for correcting their deformities. When they are refused to make an operation, sometimes they try to change the form of misshapen parts of their body themselves. It is observed in schizophrenia.

The hebephrenic syndrome: a combination of the hebephrenic excitement with foolishness and non-continuous thinking. Patients euphoric, make grimace, mimic the others. Their behavior is fanciful, unproductive, not purposeful. It is observed mostly in schizophrenia.

The catatonic syndrome manifests itself in the form of the impulsive, absurd, senseless excitement (hyperkineses, movement and speech stereotypies, ambivalence) with unmotivated aggression or stupor (an absolute or partial immobilization, a passive or active negativism, mutism, the patients keep a given posture (wax flexibility, catalepsy), keep their head over a pillow long ("an air pillow") or a periodic change of these states. It is observed in schizophrenia, infectious and other psychoses.

The psychoorganic syndrome is characterized by mild disturbances of intellect. The patients' attention and fixation memory diminish, they recall dates of their life and commonly known historical events with difficulty. Their rate of thinking is delayed. The patients experience difficulties in acquiring new knowledge and skills. The level of their judgements and criticism decreases.

Either levelling of the personality or sharpening of streaks of the disposition takes place. Depending upon the fact what emotional responses prevail, the following variants are distinguished: *explosive* (explosiveness, rudeness, aggressiveness), *euphoric* (inadequate joviality, carelessness), *apathetic* (indifference). Some partial reversibility is possible, more frequently there is a gradual aggravation and development of the syndrome of dementia. This syndrome is typical for exogenous-organic lesions of the brain.

Korsakoff's amnestic syndrome includes disturbances of memory for the current events (fixation amnesia), retro- and anterograde amnesia, pseudoreminiscences, confabulations, amnestic disorientation. Korsakoff's syndrome is observed in an organic cerebral lesion caused by infectious diseases of the brain, intoxication (including alcoholic one), brain injury, vascular cerebral pathology, etc.

Oligophrenia is inborn mental deficiency due to congenital or acquired at early stages adverse impacts (hereditary factors, mother's diseases during pregnancy (intoxication, infection), a physical injury of the fetus, a difficult childbirth causing a cerebral haemorrhage or brain injuries in a newborn) and manifesting itself by general psychic underdevelopment and intellectual defect.

Oligophrenia is divided into idiocy, imbecility and debility.

Idiocy – IQ 20 and less. Patients with a deep degree of idiocy are characterized by absence of speech, they do not recognize their people, their facial expression is vacant, their attention is almost not attracted by anything; they swallow food without chewing it well. A sharp decrease in all kinds of sensitivity is noticed. Such patients begin to walk late. Their movements are poorly coordinated. They do not respond to other people's facial expression and gesticulation, they are slovenly in relieving nature and are not capable of self-servicing. Sometimes it is possible to observe stereotyped movements, e.g., pendulum-like swings of the head or trunk from side to side.

Idiocy of the moderate and mild degrees is characterized by an ability to laugh and weep, some understanding of other people's speech, facial expression and gesticulation. Such patients are able to fix their look on objects. There is some development of the orientation reflex in them. They can independently eat food, but do it untidily; they may comprehend some simplest situation, and though they orientate themselves in a familiar place, they absolutely lose any orientation in time. Their vocabulary is limited by several dozens of words. They recognize their relatives and friends and may demonstrate an elementary attachment.

Imbecility – IQ 21-50. In case of imbecility, the patient's speech is more or less developed. But its development takes place with a delay, the patients begin to talk during the 3rd-5th year of their life. The stock of words is extremely poor. The patients understand other people's speech, facial expression and gesticulation within the range of their constant use. They do not comprehend a new situation to the end and need help, directions and guidance. They master the simplest skills but display them carelessly. With difficulty, they learn counting up to 20, can learn letters of the alphabet by heart, but are not able to master reading and writing.

Debility is a mild form of oligophrenia, IQ 51-70. The patients possess a significantly larger vocabulary than in imbecility, but lack flexibility of speech and mostly resort to stereotyped expressions, hackneyed phrases, learned turns of speech. It is not in rare cases that speech defects in the form of lisping and agrammatisms are observed. Differentiated movements are insufficiently developed, but simple forms of labour activity may be mastered. It is possible to teach such patients in conditions of auxiliary school.

Dementia – acquired mental defect with predominant intellectual function disorder.

Lacunar dementia is characterized by a decrease in the capacity for work, a progressive loss of knowledge and skills, an irregular weakening of memory (professional knowledge, skills and automated actions can be for a long time remain), poor judgements, affective instability, loss of flexibility in mental processes, deterioration of adaptability, decrease of self-control. But the patient's attitude to the surroundings, his relatives and friends remains like it was before, a sphere of interests undergoes little changes, the convictions formed before are preserved. The personality becomes poor, but preserves its

own system of relations, basic moral-ethic properties. In such cases one says about an organic decrease in the level of the personality, formation of "a residual personality". It occurs in the clinical picture of cerebral atherosclerosis, diabetic microangiopathy, syphilis of the brain.

In total dementia, a complete disintegration of the personality takes place. It is characterized by a sharply expressed narrowness in the sphere of interests coming to satisfaction of the elementary biological necessities. In the first turn, the highest levels of the personality and higher emotional manifestations suffer here. The patients are roughly uncritical to their mental deficiency. It is observed in degenerative disease of Alzheimer's, Pick's, in meningoencephalitis.

The frontal syndrome is a combination of signs of total dementia with a lack of spontaneousness or, on the contrary, with general disinhibition. It is observed in organic lesions of the brain with a preferential impairment of its frontal lobes: tumours, brain injuries, Pick's disease.

Capgras' syndrome (named after J.M. Capgras) manifests itself by a disturbance in recognizing people. The following syndromes are distinguished: the syndrome of a *positive double*, when the patient regards unfamiliar people as his friends, and the syndrome of a *negative double*, when the patient does not recognize his relatives and acquaintances, considers them as dummies, twins, doubles of his relations.

Fregoli's symptom is a variety of Capgras' syndrome: such patients believe that their "persecutors" change their appearance in order not to be recognized by anybody.

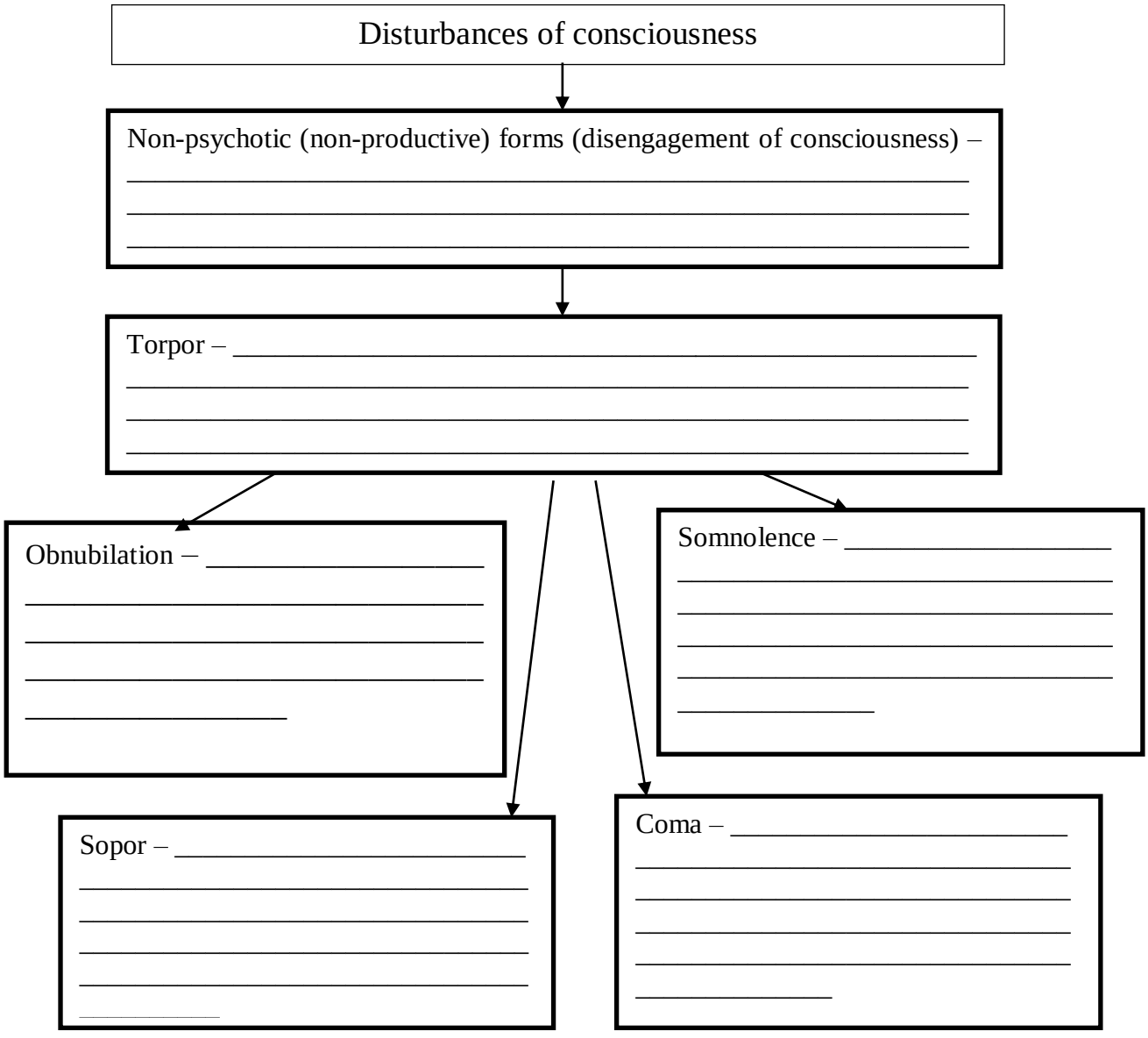
Control questions

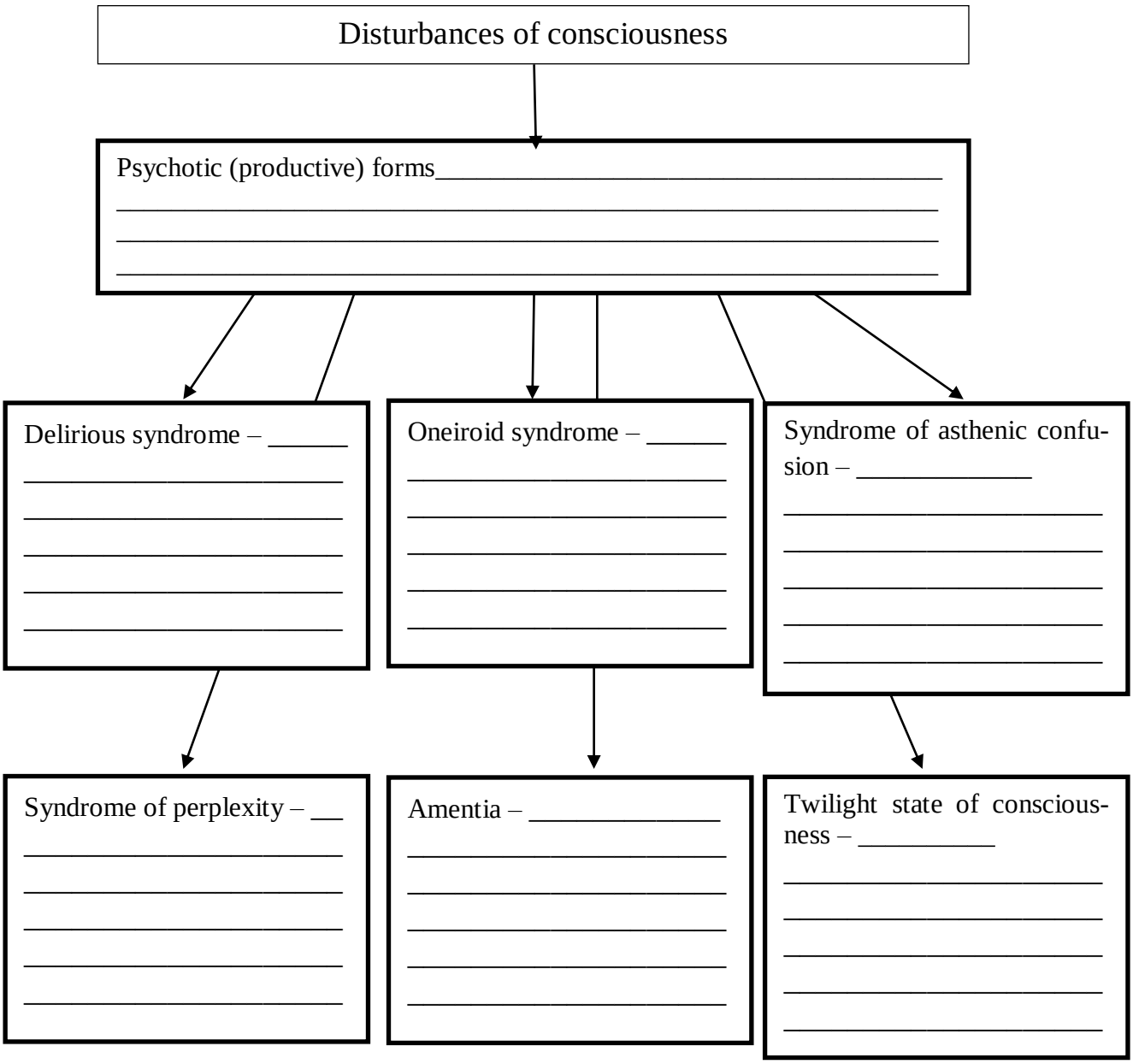
1. What are the differences between physiological and pathological affect? _____
_____
_____
_____
_____

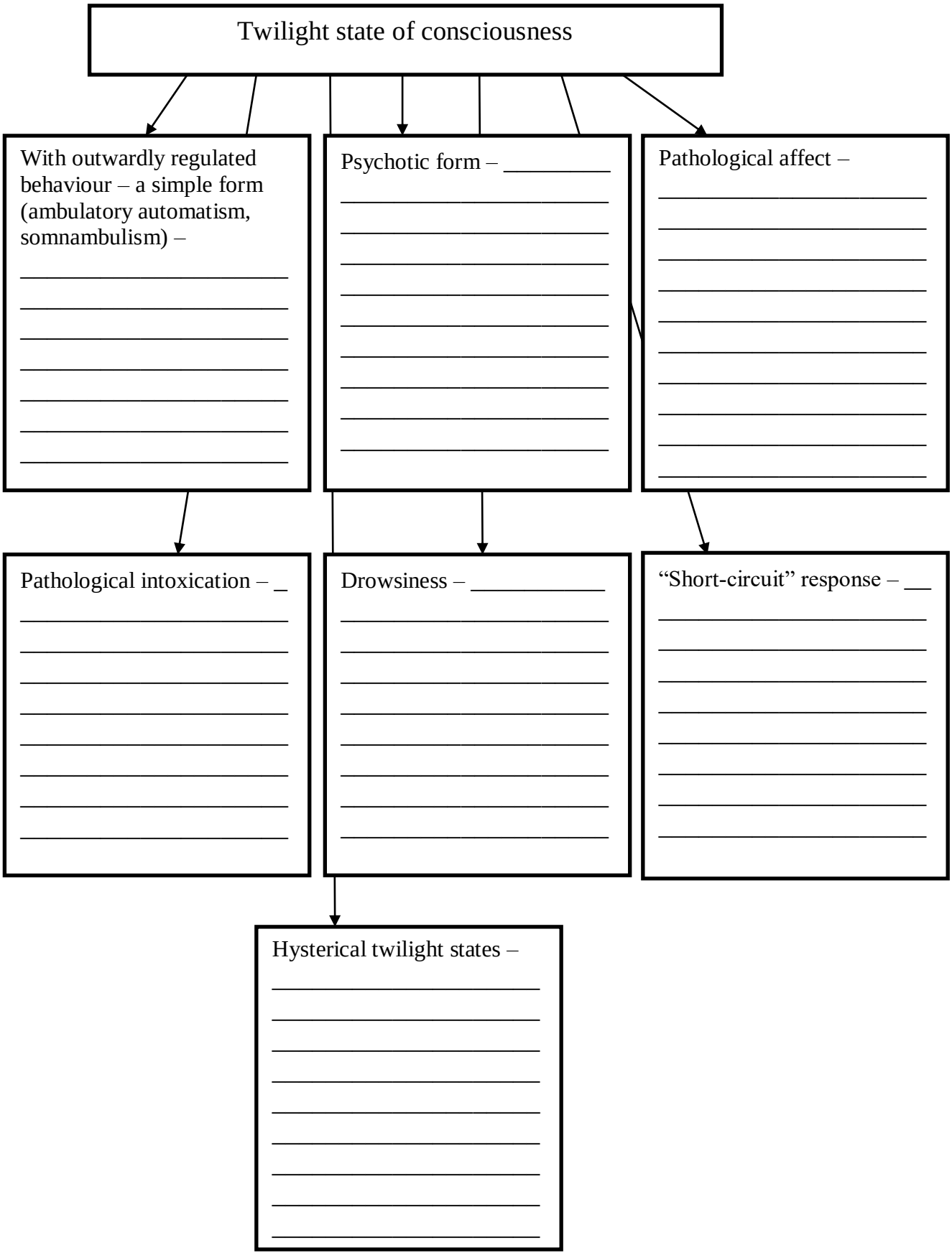
2. List the criteria of disturbed consciousness.
_____
_____
_____
_____
_____

3. Describe asthenic confusion syndrome and its clinical variants. _____
_____
_____
_____
_____

4. Give definitions & Fill the empty cells




Disturbances of consciousness
Psychotic (productive) forms_____
Delirious syndrome – _____
Oneiroid syndrome – _____
Syndrome of asthenic confusion – _____
Syndrome of perplexity – ___
Amentia – _____
Twilight state of consciousness – _____


Twilight state of consciousness
With outwardly regulated behaviour – a simple form (ambulatory automatism, somnambulism) –
Psychotic form – _____
Pathological affect –
Pathological intoxication – _
Drowsiness – _____
"Short-circuit" response – __
Hysterical twilight states –

Tests

1. Decreased activity is typical:
A. For paranoic syndromes
B. For asthenic conditions
C. For twilight disorders of consciousness
D. For mania
E. In any of these cases.

2. For what of these syndromes is typical suddenly onset and end (often end with sleeping), total amnesia?
A. Delirium
B. Twilight disturbance of consciousness
C. Amentia
D. Kandinsky-Clerambault syndrome.
E. Catatonic syndrome.

3. The patient is sitting on the bed without any motor activity, look to spase. Facial expression is changeable. Answer on the questions in monosyllables, after repeated requests. Sometimes he is telling to people, that sees some fantastic world populated by aliens, see other planets. What kind of syndrome can think of?
A. Paranoid
B. Delirious
C. Oneiroid
D. Illusions
E. Amentia.

4.Patient M. 19 years, was admitted to hospital with an exacerbation of skin disease neurodermatitis (Skin rash on the hands and face). Before hospitalization did not come out on the street because she believes that "everyone was looking at her," laughing disfigured face.On examination: consciousness is clear, fixed on the exterior of the change, she said that "was ugly." She believes that other patients believe it "contagious." During the conversation, the patient susceptible judgment correction soglaschaetsya that during treatment decreased the number of lesions. Seeking sympathy, asking for help.What psychopathological syndrome should be suspected in this case?
A. Dismorfobia syndrome
B. Hysterical syndrom
C. Asthenic syndrome
D. Asthenic-depressive syndrome
E. Phobic syndrome

Tasks

1. To general hospital comes the patient suffering from pancreatitis. During the conversation it became clear that sometimes he has the state, during which he is behaving strangely, "somewhere to run, do not respond to questions in essence, once attacked a passerby." All this is told relatives, the patient himself does not remember anything. Qualify disorder that occurred in the patient history. What disorder of consciousness dose the patient have?

_____
_____
_____
_____

2. A 30 years old man of as a result of the conflict situation has developed an emotional reaction, accompanied by a storm and vegetative manifestations, sharp narrowing, then confusion, loss of purposeful behavior, acquiring automated nature of socially dangerous actions. This reaction resulted in a deep sleep, followed by total amnesia excitation period. Which of the preliminary diagnosis is the most probable? _____
_____
_____
_____
_____

LIST OF QUESTIONS FOR PREPARING FOR CONTROL

1. Subject and tasks of psychiatry.
2. Achievements of ukranian scientists in the field of psychiatry.
3. Structure of psychiatric and substance abuse (narcologic) aid. Structure of psychiatric hospitals and dispensary.
4. Legal principles of psychiatric aid. The modern concept of mental health in Ukraine. The main indications for hospitalization in a psychiatric hospital.
5. Methods of psychiatric examination: clinical, paraclinical, psychodiagnostical.
6. The concept of psychopathological symptom, syndrome and disease.
7. Disorders of sensations and perception. Classification. Definitions.
8. Disorders of memory and attention. Classification. Definitions.
9. Disorders of thinking and intelligence. Classification. Definitions.
10. Disorders of emotion and effector-volitional sphere. Classification. Definitions.
11. Disorders of consciousness and self-consciousness. Classification. Definitions.
12. Depressive syndrome: the psychotic and non-psychotic variant. Diseases in which it occurs.
13. Asthenic syndrome and its variants. Diseases in which it occurs.
14. Neurasthenic syndrome. Diseases in which it occurs.
15.Obsessive-compulsive syndrome. Diseases in which it occurs.
16. Dysmorfophobia, dysmorfomania syndromes. Diseases in which they occur.
17. Apathy- abulia syndrome. Diseases in which it occurs.
18. Delirious syndrome. Diseases in which it occurs.
19. Oneiric syndrome. Diseases in which it occurs.
20. Amential syndrome. Diseases in which it occurs.
21. Derealization and depersonalization syndrome. Diseases in which it occurs.
22. Maniacal syndrome. Diseases in which it occurs.
23. Paranoid syndrome. Diseases in which it occurs.
24. Paranoiac syndrome. Diseases in which it occurs.
25. Paraphrenic syndrome. Diseases in which it occurs.
26. Hebefrenic syndrome. Diseases in which it occurs.
27. Catatonic syndrome. Diseases in which it occurs.
28. Psychoorganic syndrome. Diseases in which it occurs.
29. Abstinence (withdrawal) syndrome. Diseases in which it occurs.
30. Pathological and physiological affects. States in which they occur.

Class №4
MENTAL DISORDERS IN INFECTIOUS AND SOMATIC DISEASE, TUMORS AND BRAIN INJURIES. EPILEPSY.

Mental disorders in vascular diseases

In ICD-10, mental disorders in vascular diseases of the brain belong to section F00-F09 as "Organic, including symptomatic, mental disorders". The leading syndrome is encoded with a corresponding third sign. All the diseases, accompanied by changes in the cerebral vessels, may cause similar psychopathological manifestations. The clinical manifestations of mental disorders in vascular diseases of the brain have a number of peculiarities owing to the complex character of their pathogenesis. These diseases are characterized by all the features of somatogenic mental disorders, as well as the peculiarities caused by disturbances in the blood supply of the brain proper.

A high prevalence of cerebral vascular diseases, particularly increasing in people of a middle and old age, makes the study of the mental disorders, possible in this pathology, by general practitioners quite urgent.

Classification of mental disorders in cerebral vascular diseases

1. Neurosis-like syndromes
2. Psychopathy-like syndromes
3. Defect-organic states:
   - 3.1. Psychoorganic syndrome
   - 3.2. Dementia
   - 3.3. Korsakoff's syndrome
4. Psychoses:
   - 4.1. Acute vascular psychoses
   - 4.2. Endophorm vascular psychoses

Neurosis-like syndromes. The clinical picture of initial manifestations in cerebral atherosclerosis is characterized by slowly intensifying neurosis-like symptoms in the form of short temper, reduced concentration of attention, increased fatiguability, a decrease in the capacity for work. These phenomena are accompanied by other signs of initial manifestations of a chronic circulatory insufficiency of the brain: headaches, dizziness, tinnitus. Typical sleep disturbances manifest themselves by difficult falling asleep, frequent cases of waking up at night, absence of the feeling of rest after sleep and often sleepiness at daytime. Many patients reveal expressed sensitivity to weather changes. They suffer from cardiophobia, annoying fears of death, height, traffic, large crowds, etc.

Patients with atherosclerosis develop a lack of restraint of emotions in the form of faintheartedness (excessive tearfulness). Short temper is often accompanied by affects of anger changing into the feeling of repentance. These patients easily develop various negative emotions (dissatisfaction, short temper) which are overcome with a great difficulty.

Psychopathy-like syndromes. A further progress of the morbid process results in a "caricatured" increase of premorbid streaks of the personality, figuratively termed as a "caricatured distortion of the personality". For instance, restless people become expressively anxious, mistrustful ones suspicious, hot-tempered ones still more unrestrained, economical ones very misery.

Defect-organic disorders. In the process of progressing of organic disturbances in the brain the patients develop the psychoorganic syndrome manifested by the loss of ability for fine differentiation in thinking, a gradual decrease in the capacity for work, a reduced criticism, disturbances of attention and memory.

Most frequently such patients complain of memory disturbances, which at first are limited by hypomnesia: it is difficult for the patients to memorize new information, current events, names and dates. Later a gradual loss of deeper and deeper layers of information (by Ribot's law) is observed. Typically, the patients have a critical attitude to their state and feel depression because of realization of their insolvency, make attempts to use detailed notes for compensation of their memory disturbances. Korsakoff's syndrome may develop at later stages. As the disease progresses, the patients' thinking changes: an excessive detailing, concentration on minor things appear, the patients find it difficult to isolate the main idea, they switch over from one subject to another. Then stiffness of thinking devel-

ops. A significant expressiveness of disturbances in the thinking and memory, an emotional lability and lack of restraint at the later stages of the illness result in behavioural disorders. The above state may remain stable for a long period of time and give place to dementia not in all the patients. Cerebral atherosclerosis is typically characterized by lacunar dementia, when individual peculiarities of the personality are preserved and the patients critically assess their intellectual defect. In hypotonia, the psychoorganic syndrome and dementia do not develop.

Acute vascular psychoses. These may develop in the form of delirium, amentia, more seldom the oneiroid syndrome and a twilight state of consciousness in case of an acute decompensation of the cerebral circulation caused by various unfavourable factors (an impaired activity of the cardiovascular system, an exacerbation of some chronic or appearance of an acute somatic disease, intoxication, psychic traumas). In delirium, visual hallucinations are less bright than in delirium tremens. A sharp increase in blood pressure after a period of anxiety may give rise to amentia.

Endoform psychoses. Patients with the hypertensive disease and atherosclerosis may develop protracted psychotic states in the form of the depressive, paranoid syndromes and that of hallucinosis. The clinical picture of protracted vascular psychoses is characterized by a variety of symptoms: the asthenic background, signs of an intellectual-mnestic decrease. The depressive syndrome develops in about 50 % of cases, most frequently after psychic traumas or a change of the life stereotype. At first, the patients reveal intensification of their asthenic and neurotic symptoms, later there is a gradual worsening of the mood, with appearance of anxiety, fear, restlessness. Sometimes the patients express delusions of self-condemnation and self-humiliation, or those of persecution and hypochondriacal ones, the latter being based on unpleasant sensations in the internal organs. As a rule, the patients with depression of the vascular genesis do not avoid their associates and express sympathy to other patients.

Approximately every fourth patient with vascular psychoses reveals the paranoid syndrome. At first, they develop suspiciousness, anxiety, fear, later delusions of persecution, reference, jealousy, poisoning, hypochondriacal ones. The delusions have many subjects, they are not systematized, do not tend to expansion, and often are accompanied by auditory and visual hallucinations. The patients' behaviour is more often passive-defensive, aggressive actions are rare.

The treatment of hypertensive disease must be complex, constant and strictly individual. *The treatment* of cerebral atherosclerosis is more effective at early stages of the disease; it must be complex and prolonged. The therapy is aimed at normalization of lipid metabolism and cerebral haemodynamics, activation of nerve cell metabolism, control of psychopathological disorders. Drug hypotensive therapy must be combined by indications with psychopharmacotherapy and psychotherapy.

Atherosclerotic psychoses are controlled with help of neuroleptics. The use of neuroleptics should begin with small doses, preferably small doses of more potent drug preparations before large doses of less potent ones. The depressive syndrome requires administration of antidepressants; preferable are drugs from the group of selective inhibitors of serotonin uptake due to their larger safety and tolerance. In anxious disorders, tranquillizers by short courses and serotoninergic antidepressants are indicated. The treatment in case of atherosclerotic dementia is of low effect, in order to slow down the progress of the disease and nootropic drugs are recommended.

For *the prevention* of atherosclerosis, it is recommended to restrict a diet rich in cholesterin, exclude intoxications (alcoholism, smoking), prevent mental and physical overstrain, ensure a correct organization of labour and rest.

The psychotherapy is directed at formation of a rational attitude to the disease, training in the skills of relaxation and expression of emotions. When administering drug preparations it is necessary to employ mediated psychotherapy which forms confidence in the efficacy of the treatment. Rational, hypnosuggestive and narcopsychotherapy are used.

In order to prevent the hypertensive disease, it is very important to remove all the factors causing the state of affective tension. Normalized family relations, a correct organization of labour and rest, physical exercises, a diet regimen, exclusion of intoxications – all these factors contribute to prevention of the hypertensive disease, also producing a good therapeutic effect in its initial stages.

Mental disorders in infectious diseases

Mental disorders develop practically in all acute and chronic infections.They are often accompanied by disturbances of consciousness in the form of the delirious and oneiroid syndromes, amentia, torpor, a twilight state of consciousness (epileptiform excitement). At the same time, chronic

psychoses are oftener characterized by endoform manifestations (hallucinosis, hallucinatory-paranoid syndrome, apathetic stupor and confabulosis). In some cases there is development of organic, irreversible states in the form of the psychoorganic, Korsakoff's syndromes and dementia.

Depending upon the character of a lesion of the brain, the following disturbances are distinguished: 1) symptomatic mental disorders, which result from an intoxication, an impairment in the cerebral haemodynamics, hyperaemia; 2) meningoencephalitic and encephalitic mental disorders caused by inflammatory processes in the meninges, vessels and matter of the brain; 3) encephalopathic disorders which develop as a result of postinfectious degenerative and dystrophic changes in the brain structures.

Classification of mental disorders of the infectious genesis

a) syndromes of disengagement of consciousness (a nonpsychotic change): *obnubilation, somnolence, sopor, coma*;

b) functional nonpsychotic syndromes: *asthenic, asthenoneurotic, asthenoabulic, apathoabulic, psychopathy-like*;

c) psychotic syndromes: *delirious, oneiroid, catatonic, paranoid and hallucinatory-paranoid, asthenic confusion, a twilight state of consciousness, amentia, hallucinosis*;

d) psychoorganic syndromes: simple psychoorganic, Korsakoff's amnestic, epileptiform, dementia, parkinsonism.

In case of a mild course of an infectious disease, mental disorders are limited by nonpsychotic manifestations, while in severe acute infections and exacerbations of chronic infections the asthenic states are combined with the syndromes of disengagement and cloudiness of consciousness.

Recently, owing to the pathomorphism of the mental pathology, mental disorders in infectious diseases most often manifest themselves by disturbances at the nonpsychotic, border-line level, mostly represented by the asthenic syndrome which is accompanied by pronounced autonomic disturbances, cenesthopathic, hypochondriacal, obsessive phenomena, disturbances in the sensory synthesis. Emotional disorders are more frequently characterized by depressive manifestations, often with a dysphoric tint: with low spirits, maliciousness, short temper. In a protracted course of a disease there is formation of the personality shifts, the character changes, and excitability or streaks of diffidence, anxiety and nervousness appear. These symptoms may be rather stable.

Mental disorders in encephalitis are represented by acute psychosis with confusion, affectiveness, hallucinations, delusional disorders and catatonoid, development and psychoorganic of Korsakov syndrome.

The course of mental disorders in infectious diseases has its age-specific peculiarities. Thus, in children with acute infections manifesting themselves by an elevation of their body temperature, mental disorders are vivid and accompanied by general disinhibition, stubbornness, anxiety, attacks of fear, nightmares, delirious episodes with frightening hallucinations. At the initial period of an infectious disease children may complain of general weakness, headache, disturbances of sleep (difficult falling asleep, night fears), capriciousness, tearfulness, some visual hallucinations, particularly at night.

Children at the acute stage of an infection often develop torpor, sopor and coma, predelirious states: short temper, capriciousness, anxiety, nervousness, hypersensitivity, weakness, as well as superficial perception, attention and memorization, hypnagogic illusions and hallucinations. Children before 5 years of age often have convulsive states and hyperkineses, while productive signs in them are very rare and manifest themselves in motor excitement, disinhibition, rudimentary delirious states, illusions.

At the period of convalescence, against a background of the asthenic syndrome, children may develop fears, psychopathy-like disorders, puerile forms of behaviour, defective memory for current events, a delay in their psychophysical development. In epidemic encephalitis, children and juveniles develop psychopathy-like disorders, an impulsive motor anxiety, disturbances of drives, foolishness, asocial behaviour, an inability to carry out systematic psychic activity with absence of dementia. Meningititides in younger children are accompanied by listlessness, adynamics, drowsiness, torpor with periods of motor anxiety. Convulsive paroxysms are possible.

The diagnosis of infectious psychosis can be made only if there is an infectious disease. Acute psychoses with syndromes of disturbed consciousness most frequently develop against a background of acute infectious diseases, protracted psychoses are typical for a subacute course of an infectious disease.

The treatment of infectious psychoses is provided at mental hospitals or infectious in-patient departments under the observation by a psychiatrist and supervision by the personnel; it includes active treatment of the basic disease in the form of immune therapy, administration of antibiotics, disintoxication, dehydration, general health improving therapy. Psychoactive drugs are administered with regard for a leading psychopathological syndrome.

In acute infectious psychoses with cloudiness of consciousness or acute hallucinosis, neuroleptics are indicated. Protracted psychoses are treated with neuroleptics taking into consideration psychopathological signs: aminazine and other neuroleptics with a sedative effect. In depressive states, antidepressants are administered which can be accompanied by neuroleptics if the patients agitate. In the psychoorganic and Korsakoff's syndromes, nootropic drugs are widely used. In patients with prolonged protracted psychoses, as well as irreversible psychoorganic disorders, it is important to carry out rehabilitative measures, including an adequate solution of their social-occupational problems.

Acute infectious psychoses usually pass without leaving any traces, but often infectious diseases are followed by development of pronounced asthenia with emotional lability and hyperaesthesia. It is considered to be prognostically unfavourable if muttering delirium develops with deep cloudiness of consciousness and a sharply pronounced excitement in the form of disorderly tossing, particularly if this state is preserved when the body temperature falls. Protracted psychoses may result in personality changes by the organic type.

Mental disorders in brain injuries

Brain injuries are some of the most frequent causes of mortality and steady loss of capacity for work; annually the number of patients with a traumatic injury of the brain increases by 2 %. In the structure of peace-time injuries, the life, transport, industrial and sports ones prevail. Such complications of brain injuries as development of the epileptiform syndrome, traumatic cerebrasthenia, encephalopathy, dementia, pathocharacterological disorders and their influence on the social adaptation of patients are of a great medical importance. In more than 20 % of cases, brain injuries cause disability owing to neuromental diseases. Brain injuries are divided into open (involving skin integuments and skull bones) and closed ones. In its turn, open injuries are subdivided into penetrating (with impairment of the dura) and nonpenetrating ones. They always give rise to complications in the form of meningoencephalitis, abscess, osteomyelitis. Among closed injuries, there are concussions (commotions) which occur most frequently, as well as contusions and compressions. It is not in rare cases that a concomitant injury of the brain is observed.

Mental disorders caused by a brain injury depend upon the period of the traumatic disease. Thus, **at *the most acute initial period***, torpor, sopor, coma, disturbances in the cardiovascular activity and respiration are observed.

The acute periodis more frequently characterized by nonpsychotic syndromes (asthenic, apathoabulic syndromes, epileptiform seizures, anterograde and retrograde amnesia, surdomutism) and rarer by psychotic ones (a twilight state of consciousness, posttraumatic delirium, dysphoriae, Korsakoff's syndrome).

At ***the late period***, nonpsychotic disorders are observed: the asthenic, asthenoneurotic, epileptiform, psychopathy-like (affective instability) syndromes, while late posttraumatic psychoses (hallucinatory-paranoid, manic-paranoid, depressive-paranoid) occur significantly rarer.

Remote consequences of a brain injury include cerebrasthenia, encephalopathy, dementia, posttraumatic epilepsy, a posttraumatic development of the personality.

Traumatic cerebrasthenia, developing in 60–75 % of cases, is the most frequent consequence of a brain injury. The clinical picture of the disease is characterized by prevalence of some gradually increasing weakness, a reduction of the mental and physical productivity, accompanied by shortness of temper and exhaustion. There are transitory fits of short temper, after which the patients usually regret their lack of restraint. Autonomic disturbances manifest themselves by fluctuations in blood pressure, tachycardia, dizziness, headache, sweating, vestibular disorders, a disturbance in the sleep-awaking rhythm. The patients badly endure going by transport, swinging, watching TV. It is not in rare cases that they complain of feeling unwell after changes of the weather and when staying at some stuffy premises. Typically, torpidity and rigidity of nervous processes are observed. Ability for a rapid switch-over from some activity to another is reduced, but a forced necessity to do this work results in

decompensation of the state and an augmentation in the expressed cerebrasthenic symptoms. Traumatic cerebrasthenia is often combined with different neurosis-like symptoms, phobiae, hysterical reactions, autonomic and somatic disorders, anxiety and subdepressive symptoms, autonomic paroxysms.

Traumatic encephalopathy develops against a background of residual phenomena of an organic brain lesion, whose localization and severity cause peculiarities in the clinical picture. The most frequently observed are affective disorders with underlying psychopathy-like disorders of the excitable and hysteric types. Patients with the apathetic variant of encephalopathy are characterized by expressed asthenic disturbances with prevalence of exhaustion and fatiguability, they are listless, inactive, with a reduced sphere of interests, memory disturbances and difficult psychic activity. Emotional excitability in these patients prevails over exhaustion; they are rough, hot-tempered and inclined to aggressive actions. Fluctuations in their mood are observed, inadequate fits of anger easily develop. The productive activity may be hampered owing to affective disorders, it causing still more dissatisfaction with themselves and responses of irritation. The patients' thinking is characterized by inertness and a disposition to stick to unpleasant emotional feelings. Dysphoriae may develop in the form of fits of depressed-malicious or anxious mood lasting several days; at this time the patients may make aggressive and autoaggressive acts, demonstrate a disposition to vagrancy (dromomania).

Epileptiform paroxysmal disorders (posttraumatic epilepsy) may form at various terms following a brain injury suffered, most frequently after several years. They may be various, such as generalized, Jacksonian seizures, paroxysms without contractions: absences, fits of catalepsy, so-called epileptic sleeps, psychosensory disorders (metamorphopsiae and disorders in the body scheme). Appearance of autonomic paroxysms with expressed anxiety, fear, hyperpathy and general hyperaesthesia is possible. Fits of contractions may be frequently followed by twilight states of consciousness, thereby demonstrating an unfavourable course of the disease. They are often caused by additional exogenous factors, first of all alcoholic intoxication, as well as by psychic traumatization. The duration of twilight states is not long, but sometimes it may last up to several hours.

Within the remote period of a brain injury, so-called endoform (affective and affective-delirious) psychoses may develop. Affective psychoses pass in the form of monopolar maniac or, rarer, depressive states. They are characterized by an acute onset, an alternation of euphoria with anger, moria-like foolish behaviour. It is not seldom that a maniac state appears against a background of exogenous factors (intoxications, repeated injuries, surgical interventions, somatic diseases).

Affective-delirious psychoses are characterized by hallucinatory-delirious and paranoic syndromes. As a rule, hallucinatory-delirious psychoses develop acutely against a background of symptoms of traumatic encephalopathy with prevalence of apathetic disturbances. The risk of falling ill with the disease increases in patients with somatic disorders, as well as after surgical interventions. Their delusion is concrete and not systematized, the hallucinations are true, there is an alternation of psychomotor excitement and inhibition, the affective feelings are caused by delusions and hallucinations. Depressive states may be triggered by psychic traumas. Along with melancholia, the patients develop anxiety, hypochondriacal feelings with a dysphoriac assessment of their own state and surroundings.

Paranoic psychoses develop more frequently in males 10 and more years after a brain injury. The clinical picture is characterized by presence of overvalued ideas and delusions of jealousy with litigious and querulous tendencies. The paranoic delusions of jealousy may be combined with the delusions of damage, poisoning, persecution. The psychosis has a chronic course and is accompanied by formation of the psychoorganic syndrome.

Posttraumatic dementia develops in 3–5 % of cases of a brain injury. It may either be a consequence of posttraumatic psychoses or the progressive course of the traumatic disease with repeated injuries, as well as result from a developing cerebral atherosclerosis. Patients with posttraumatic dementia are characterized by prevalence of memory disturbances, a reduced sphere of interests, listlessness, faint-heartedness, sometimes importunity, euphoria, disinhibited drives, overestimation of their abilities, absence of criticism.

Age-specific peculiarities of the traumatic disease. Brain injuries in children occur rather frequently, especially at the age from 6 to 14 years. Mental disorders in children at the acute period appear against a background of an increased intracranial pressure: they reveal general cerebral and meningeal disturbances, expressed autonomic and vestibular symptoms and signs of a local brain lesion. The most severe symptoms develop a few days after a brain injury. Paroxysmal disorders, which

occur both at the acute period and during convalescence, are a frequent symptom. As a rule, the course of the traumatic disease in children is benign, even severe local disorders are subject to regression. Asthenia within the remote period is slightly expressed, while motor disinhibition, emotional lability and excitability prevail. Sometimes after severe brain injuries, which patients suffered in early childhood, they reveal a mental defect resembling oligophrenia.

In young children (up to 3 years of age), no complete disengagement of consciousness is usually observed, their general cerebral disorders may be obliterated. Multiple vomiting and autonomic symptoms (an elevated body temperature, hyperhidrosis, tachycardia, dizziness, etc.) are clear signs of a brain injury. Typically, an arrhythmia of sleep and waking is observed. The child would not sleep at night and is sleepy at daytime.

Traumatic cerebrasthenia in children manifests itself by headaches, which appear suddenly or under certain conditions (at stuffy premises, because of running or some noise); dizziness and vestibular disorders are less frequent. The expression of asthenia proper may be very poor, while motor disinhibition, lability of emotions, excitability, autonomic vascular disturbances (intensified vasomotor reactions, a bright dermatographism, tachycardia, hyperhidrosis) prevail. The apathoadynamic syndrome in children is characterized by listlessness, apathy, sluggishness, a reduction of activity and striving for it, limited contacts with their associates owing to rapid exhaustion, and a lack of interest. Such children are not able to cope with their school syllabus, but they do not disturb their associates and do not rouse any censure from their teachers.

Children with the hyperdynamic syndrome have prevalence of motor disinhibition, fussiness, sometimes with high spirits and a tint of euphoria. Such children are excited, restless, they would run, make a noise, often jump up, grasp some things but there and then throw them. Their mood is characterized by instability and carelessness. Outwardly, the patients are good-natured, suggestible, sometimes foolish. A reduced criticism and difficult mastering of new knowledge are observed. It is not in rare cases that a further development of these disorders result in some more differentiated psychopathy-like behaviour. The children cannot get on with their classmates, do not master new knowledge, violate discipline, disturb their associates, terrorize their teachers. Owing to the fact that such patients do not produce any complaints about their health, for a long period of time their inadequate behaviour is not regarded as morbid and only disciplinary demands are made to them.

Mental disorders after brain injuries in elderly people are usually accompanied by a loss of consciousness. The acute period is characterized by prevalence of autonomic and vascular disturbances, dizziness and fluctuations in blood pressure, while nausea and vomiting occur rather rarely. Owing to a defective vascular system, intracranial haemorrhages are often observed; they may develop some time later and manifest themselves by a clinical picture resembling that of a tumour, or epileptiform seizures. Stable asthenic disturbances, listlessness, adynamia and various psychopathological symptoms are more constant in the remote period.

Pathogenesis of mental disorders in the brain injury. Appearance of mental disorders within the acute period of the brain injury is caused by a mechanical damage and oedema of the cerebral tissue, development of haemodynamic disturbances and cerebral hypoxia. In this case, transmission of impulses in synapses is affected, and disturbances develop in the mediator metabolism and functions of the reticular formation of the brain stem and hypothalamus. Brain injuries of the mild degree are accompanied by an insignificant destruction of nerve cells with a subsequent restoration of their functions, while in severe injuries there is a death of neurons with development of gliotic cicatrices or cystic formations. A disturbance of synaptic relations between nerve cells, traumatic asynapsis, may be observed.

Pathogenesis of mental disorders in the remote period of the brain injury is various, the character and expressiveness of disturbances depend upon the severity of the injury, the patient's age and additional hazards. Very important are repeated injuries, addition of alcoholism and a pathological vascular process.

A favourable prognosis in brain injuries is observed in the following cases: an absolute attenuation of the main active traumatic process and its complications, and absence of general cerebral disorders; locality of the injury and a partial character of the mental defect (isolated phenomena of dysfunction, a single syndrome or feebly expressed mental changes); a comparative preservation of the intellect and social-occupational directions of the personality; a young age of the patient; absence of

any severe concomitant nervous and somatic diseases and expressed signs of a psychopathy in the patient before the injury; an opportune enlistment to work in compliance with the patient's interests and his professional abilities.

At the same time, an unfavourable prognosis is observed in such cases as: a continuing reduction of the intellect with development of organic dementia in some patients; expressed, stable or increasing changes in the personality by the organic type; protracted psychoses with hallucinatory-paranoid, hypochondriacal and depressive syndromes that develop for the first time many months and years after the injury; epileptiform manifestations which become more frequent or appear for the first time after several years; an increasing asthenization of the patient with a reduction in his capacity for work. The prognosis in consequences of the brain injury is worsened by presence of comorbid alcoholism.

The treatment of mental disorders in brain injuries depends upon the stage of the disease, its severity and expressiveness of clinical manifestations. All the persons who received even a slight injury of the head, must be hospitalized and follow bed regimen during 7–10 days, children and elderly people require a more prolonged stay at in-patient department. In case of the symptoms demonstrating an increased intracranial pressure, dehydration is recommended. Autonomic disturbances are controlled with tranquillizers, and oxybarotherapy is recommended for reducing cerebral hypoxia. Neuroleptics, large doses of Diazepam (up to 30 mg intramuscularly) and sodium oxyburate are administered for productive psychopathological symptoms and excitement. At the period of convalescence it is recommended to use general health improving therapy, nootropic drugs, vitamins; neuroleptics are used in case of excitement.

The remote period of the brain injury requires a complex of therapeutic and rehabilitative measures consisting of psychotherapy, an adequate job and social rehabilitation of the patient. Drug therapy is administered depending upon prevalence of some or other symptoms in the clinical picture. Thus, anticonvulsive therapy is recommended in treating epileptiform disorders, antidepressants for affective depressive disorders, etc.

Long therapy and an adequate job are particularly important in the progressive course of the traumatic disease, it contributing to stabilization of the pathological process and reverse development of some morbid symptoms. The prognosis of mental disorders significantly depends upon the fact how correctly the patient follows recommendations and regimen.

In slight concussions of the brain, the patients may be disabled up to 1 month, in moderate ones up to 2 months, and in severe ones for 4 months and longer. An invalidity examination must be carried on with regard of the part played by rehabilitative measures. The patient's job should correspond to his state and abilities. Job recommendations must take into consideration presence of inertia of nervous processes that results from the brain injury and remains for a long period of time. For such patients, any job requiring a rapid switching over from some activity to another is not recommended, large physical and mental loads are contraindicated. The most complete restoration of the capacity for work takes place in patients with the asthenic syndrome.

Mental disorders in AIDS

Acquired immunodeficiency syndrome (AIDS) is one of the most dramatic and mysterious problems of modern medicine. Mental disorders in AIDS are so various that actually they include all the varieties of psychopathology, beginning with neurotic reactions and ending with severe organic lesions of the brain. Just because of this variety of mental disorders AIDS is sometimes called psychiatric encyclopaedia or psychiatric odyssey. In epidemiological studies, the people who have a seropositive reaction to AIDS but no signs of this disease make up a so-called grey area which is the first risk group. The people without any signs of the disease and no seropositive reaction to AIDS, but with a specific life style (homosexuals, bisexuals, narcomaniacs, prostitutes) belong to a so-called group of risk. This is the second risk group. People of these two risk groups also reveal a whole number of mental disorders requiring opportune diagnosis.

The spread of mental disorders in AIDS on the whole corresponds to the spread of the disease itself, because, as most authors report, in one or another way they occur actually in all the patients.

Classification of clinical manifestations in people of risk groups:

The first group (a “grey area”) consists of persons affected by AIDS virus. Though seropositivity by AIDS virus is a risk factor, it does not always show presence of this disease in a human being. The incubation period between the viral infection and development of the disease lasts from 1 month to 5 years.

The second risk group includes the people who are the most vulnerable to a danger of AIDS infection, i.e. those engaged in narcomaniae, homosexuality and prostitution. A smaller part is composed of bisexuals, heterosexuals with numerous occasional intercourses, and those who suffer from haemophilia or another disease requiring frequent blood transfusions.

Mental disorders in each of the risk groups are similar, though in the so-called grey area their rate is much higher. These are, first of all, psychogenic disorders with neurotic and neurosis-like symptoms, though sometimes they acquire the form of psychotic ones with resultant anxiety, nervousness, shortness of temper, sleeplessness, loss of appetite, sometimes with a very expressed loss of body weight. Such patients are characterized by a reduced capacity for work with a disturbance of active attention, sometimes with absolute concentration on thoughts about a possibility to fall ill with AIDS. Also common for these people are constant rereading of literature about this disease, endless searches of some or others of its symptoms in themselves, a hypochondriacal fixing on their own state of health. Initiative is significantly reduced, a feeling of hopelessness develops, libido decreases, though many patients break off all their sexual relations not because of this fact, but out of some fear “to fall ill with another bad disease”. Significantly less people break off all sexual intercourses out of altruistic motives.

Some people of the risk group (especially seropositive ones), on the contrary, display evident antisocial tendencies, seeking either to broaden their sexual relations as much as possible or to communicate AIDS in another way. Typical for this group are the states in the form of apathetic, anxious or melancholic depression with frequent ideas of self-condemnation (which usually do not reach to the degree of delusions) and suicidal thoughts, though suicidal attempts in the risk group occur rarely. Sometimes depression in these people acquires a psychotic character with agitation up to the appearance of the state of raptus melancholicus type. Patients from this risk group may also develop psychotic states in the form of sensitive delusions of reference, reactive delusions of persecution, hypochondriacal delusions accompanied by a described “feeling of untouchability”. Hysterical psychoses are also possible.

People from the risk group often develop psychosomatic diseases, first of all various pathologies of the alimentary tract.

The AIDS virus has both lymphotropic and neurotropic properties, i.e. it directly affects cells of the cerebral cortex; this fact explains development of mental disorders long before the appearance of signs of reduced immunity in the patient. A few months, sometimes even years before the manifestation of the illness many AIDS patients suffer from apathy, sleep disturbances, a reduced capacity for work, depression, narrowing of their sphere of personal contacts. But at this stage mental disorders are most frequently revealed at a so-called subclinical level.

With the appearance of expressed clinical manifestations of the illness in the form of fever, profuse perspiration at night, diarrhoea, pneumonia, etc., all these mental disorders become clinically expressed and evident.

The fact of presence of AIDS is regarded as a manifestation of expressed psychological stress with prevalence of mostly psychogenic disorders of both the neurotic and psychotic register at early stages of the illness (“the stage of realization of the disease”). Most frequently, this is depression accompanied by anguish with ideas of self-condemnation, guilt to one’s relatives, suicidal thoughts and tendencies. But, as most authors report, committed suicides occur relatively seldom. Most frequently they are observed in those people who were witnesses to their relatives or friends’ death, caused by AIDS, or are psychopathic persons. Suicidal actions are also made by those patients whom the society treats as some strangers, rejects them, does not allow to attend public places, sometimes even live in their city. This period is also characterized by appearance of obsessive-compulsive disturbances developing with or without depression. The patients complain of some annoying fear of death, annoying representations about the very process of “dying”, recollections about their sexual partners who could infect them. Some patients are very troubled by the thought (often annoying) about a possibility to infect their relatives or friends in everyday life, though they understand its absurdity.

Already at this stage, organic symptoms "sound" clearly: the patients develop dysphoriae, psychopathy-like forms of behaviour with explosiveness, irateness, aggressiveness, epileptiform seizures. A so-called psychological disorganization takes place. Often the anxiety which appears in the people after making a diagnosis of AIDS is accompanied by agitation, panic, anorexia, insomnia, as well as a feeling of irreparability and anger, often aimed at doctors. Here, anosognosia may be observed, when the patients deny presence of the illness in them, do not trust their doctors, accuse them of incompetence. Later, as the illness progresses, signs of an organic lesion of the brain become more and more evident. At the stage of formation of expressed signs of an organic defect, various psychotic disorders develop. Most frequently, these are states of cloudiness of consciousness, mostly in the form of delirium, acute paranoid, hypomaniac and maniac states. Therefore, psychopathological manifestations of AIDS are similar to the feelings of cancer patients at its terminal stage.

The main manifestation of AIDS consists in a brain lesion with a rapid growth of dementia described in 60–90 % of all the cases. In this connection, even such terms as "AIDS-dementia syndrome" or "AIDS-dementia complex" appeared. In 25 % of the observations, the AIDS-dementia complex may be revealed as early as in the manifestative period of the illness. Dementia develops in connection with diffuse subacute encephalitis, meningitis, meningeal and cerebral lymphoma (pseudotumour manifestations of the disease), cerebral haemorrhages, cerebral arterititides. The patients gradually feel it more difficult to concentrate their attention, they lose memory for current events, have spotty memory defects for the past, symptoms of lethargy. Very rapidly (within a few weeks or months) the patients develop intensifying signs of dementia with a psychomotor retardation, periods of cloudiness of consciousness (at first, by the type of a twilight state), epileptiform seizures, often turning into epileptiform status, mutism. Later these signs are accompanied by incontinence of urine and faeces, the depth of the disturbance of consciousness increases from torpor to coma. In each 10 of 13 cases computed tomography reveals total cerebral atrophy, speech disturbances usually being its first sign.

Of AIDS patients, 80 % die within two years; 90 % die at the age of 20–49 years, 93 % of them being males. Many researchers hold an opinion that just an organic lesion of the brain is one of the main causes of death in AIDS. Besides, the death may be caused by a sarcoma in 35 % of the cases or other malignant tumours, as well as various somatic diseases with a severe course. More than half of the patients (60 % of cases) die from double pneumonia.

Rather often the doctors have to differentiate mental disorders, caused by AIDS, from AIDS-phobia or delusions of AIDS infection. The number of such patients steadily increases because of a wide spread of materials about AIDS in mass media. In this connection, such terms as "pseudo-AIDS", "pseudo-AIDS syndrome" and "AIDS panic" have recently become even widespread. A diagnosis to such patients is made on the basis of clinical-psychopathological methods of examination (naturally, if seropositivity is excluded). Making a differential diagnosis of mental disorders in AIDS which are similar to schizophrenic, involutional and other symptoms, it is very important to have the most detailed family and case histories, as it is not excluded that this AIDS patient before suffered, for example, from schizophrenia. In such a case, early stages of AIDS, prior to a sharp domination of organic dementia, may reveal various psychotic symptoms typical for endogenous psychoses. Symptoms of an organic lesion of the brain in AIDS require differentiation from quite a number of organic cerebral diseases having another etiology: multiple sclerosis, brain tumour, neurosyphilis, toxoplasmosis, Schilder's disease, meningititides and encephalititides of various etiology, etc. In such cases, the problem is solved by special tests for AIDS, which must be also carried out in cases of mental disorders in seropositive people from the risk group (a "grey area").

It is more difficult to diagnose mental disorders in people from the risk group without seropositivity. Such cases require the most careful objective and subjective anamnesis, the study of the "life style" of the people from the sphere of personal contacts of this person. Also it is very important to reveal a temporary relation between the appearance of some or other mental symptoms and a psychic trauma, somehow related to AIDS (a disease or even death of some of one's close friends or relatives), reading of literature, watching of films on this subject, etc.

The etiopathogenesis of mental disorders in AIDS is mostly caused by two factors: 1) a mental (psychological) stress after receiving information about an incurable disease and related intrafamilial, interpersonal and social problems; 2) general intoxication and increasing severe lesions of the cerebral tissues, first of all nerve cells.

The AIDS virus possesses expressed neurotropic properties and can be isolated directly from the brain tissue. By the data of pathomorphological studies, some or other changes in the cerebral tissues are found in 60-90 % of observations; they are: diffuse demyelinization, disseminated perivascular changes, reactive gliosis, microfocal brain infarcts. These disorders are revealed actually in all the cerebral structures, it making the clinical picture of neuro-AIDS similar to other nosological forms based on pathomorphologically close lesions of the brain tissue. Pathomorphological cerebral changes in AIDS may resemble viral encephalititides of different origin, neurosyphilis, toxoplasmosis, disseminated metastatic lesions, multiple sclerosis, etc.

Treating mental disorders in AIDS patients, it is possible to use psychoactive medicines, tranquillizers, antidepressants of the tricyclic line, but in small doses owing to a high sensitivity of AIDS patients to any drugs, as well as to alcohol. Taking into consideration a possible development of frequent side effects, the treatment must be given with great care. There are some data that thioridazine is the least toxic. Though AIDS is incurable, but its course may be chronic with states of some remissions, therefore relevant psychotherapeutic and psychocorrective work must be done not only with the patients, but also with their associates.

An augmentation of dementia should not be a contraindication for employing psychotherapy (especially supportive one) which will help the patients to cope, as far as possible, with a number of problems caused by intellectual defects. The programme of rehabilitation should also involve all the patients irrespective of the stage of the illness and its possible outcome.

EPILEPSY

Epilepsy is a chronic endogenous-organic disease of the brain characterized by partial and generalized spasmodic seizures, typical changes in the character and thinking which achieve the degree of dementia, as well as by a possible development of acute and chronic psychoses at some stages of the disease.

The general principles of classification of Epilepsy and epileptic syndromes by ethyology

Idiopathic	– evidential disorders of CNS absents – genetic predisposition is known or probable
Symptomatic	– etiology is known and morphological disorders are determined
Cryptogenic	– a cause is unknown, concealed – the syndromes are not correspond to idiopathic forms – proofs of symptomatic character are absent

***Etiology and pathogenesis of epilepsy*.** Epilepsy is a disease with a multiple etiology and based on a change in the neuron activity, which becomes abnormal, periodic and increased with a resultant appearance of sudden high-amplitude outbreaks in a single group of neurons. This group of neurons forms an epileptic focus which generates a hypersynchronous discharge. The character of the subsequent spread of excitement along the neurons determines the kind of fits; thus, if the discharge is spread along both hemispheres then a generalized fit is produced, but if the excitement remains within the limits of the primary focus then a local (focal, partial) fit develops.

The disease strikes mostly children and juveniles. Its etiological factors include hereditary predisposition, as well as an effect of unfavorable environmental factors causing an impairment of the brain, particularly in the pre- and postnatal period. Depending upon its etiology, the primary (idiopathic, genuine) and secondary (symptomatic) types of epilepsy are distinguished. Symptomatic epilepsy may be caused by cerebrovascular disturbances, neural infections, brain injuries, an oedema of the brain, intoxications, degenerative diseases (Alzheimer's disease), endocrine disorders.

In epilepsy, there are disturbances of different kinds of metabolism (of proteins, carbohydrates, fats, water-electrolytes); recently, particular attention is paid to studying disturbances in the metabolism of GABA, whose decrease in the brain develops convulsions.

The clinical manifestations of epilepsy are represented by paroxysmal and nonparoxysmal signs of the disease. Epileptic paroxysms are subdivided into generalized and partial seizures, as well as various psychic equivalents. The clinical characteristics of an epileptic seizure are as follows: a) a sudden appearance (at any time of day or night, suddenly, irrespective of the situation); b) a short term (as a rule, a paroxysm lasts from a few seconds to several minutes); c) self-withdrawal (the seizure ceases spontaneously); d) recurrence with a tendency towards occurring more frequently; e) a "photographic" similarity of the seizures (clinical manifestations of each subsequent paroxysm almost absolutely coincide with previous seizures).

The most typical generalized epileptic seizures are a major spasmodic seizure, a minor seizure (absence), an epileptic status. A generalized tonic-clonic seizure (grand mal) may be preceded by such precursors as a change in the mood, a headache, a worsened general state developing some hours before the seizure. Just before the seizure some patients feel an aura in the form of stereotyped short-term (during a few seconds) autonomic, vestibular, sensory, motor, visceral or mental disorders. The seizure itself begins with a sudden fall and consists of two phases: ***tonic and clonic***. In ***the tonic phase*** of the seizure, which lasts 20–30 seconds, convulsions involve all the skeletal muscles. Usually they prevail in the extensors. As a result of contraction of the muscles of the chest and abdomen, the air passes through a narrowed glottis, which may cause vocalization (an epileptic cry) lasting a few seconds, the eyes are usually wide open, the mouth is half-open. The convulsions begin from the muscles of the trunk, whereupon they pass to the extremities. Usually, the shoulder girdle is slightly raised and inwardly displaced. The arms are abducted and outwardly rotated, the forearms are half-bent. The muscles of the legs are not involved so intensively, usually there is a tendency towards bending and parting the legs with their outward turning.

The clonic phase consists of short-term flexion contractions of the muscles of the trunk and extremities with their rapid relaxation. The duration of the clonic phase is 2–3 minutes. Gradually, sharp contractions of the muscles become rarer, gaps of a reduced muscle tone longer, and the spasmodic contractions end. During both phases of the spasmodic seizure, some biting of the tongue and lips may be observed.

A generalized tonic-clonic seizure has such a characteristic component as mydriasis with areflexia of the pupils to the light, as well as hypersalivation which in combination with the tongue bite in the clonic phase of the seizure results in a discharge of some blood-stained foamy contents from the mouth. During a seizure, hypersecretion appears in the salivary and other glands: sudoriferous and tracheobronchial.

Within 10–15 minutes immediately after the seizure, **the comatose period** comes; it is characterized by muscular atony with resultant involuntary urination because of relaxation of the sphincters. The pupillary and corneal reflexes are absent, while deep ones may be activated. The patients are absolutely unconscious (coma). Later, the mydriasis disappears, superficial reflexes are restored, and deep ones are decreased and often accompanied by Babinski's sign. This period usually lasts 5–15 minutes. After recovery of their consciousness the patients usually complain of a headache, pains in muscles, a bad general state; there is an absolute amnesia for the period of the seizure. The comatose state may also change into postictal (post-seizure) sleep.

Minor seizures (petit mal), absences are characterized by a sudden and short-term (2–30 seconds) disengagement of the consciousness, usually without the patient's falling down; they are accompanied by the patient's blank look, an interruption of his current activity, moderately expressed autonomic symptoms (some flushing or paleness of the face, a moderate mydriasis), though in short-term absences any clinical manifestations of the seizure often remain unnoticed. The seizure ends as suddenly as it began. Realization of the seizure is usually absent, an absolute amnesia develops, but in very short-term absences (2–3 seconds) there is not enough time for an absolute disengagement of the consciousness to develop.

The epileptic status *(status epilepticus)* is a severe complication of epilepsy: this is characterized by recurrent epileptic seizures and between them the patient's consciousness is not regained. The epileptic status requires urgent medical aid, as it gravely endangers the patient's health and life.

The causes of the epileptic status may be as follows: inadequate treatment, a sharp reduction of dosages or discontinued taking of antiepileptic drug preparations, resistance to them, as well as addition of other hazards (acute infections, intoxications, particularly taking of alcoholic drinks, a brain injury and somatic diseases).

The epileptic status is characterized by disturbance of the respiration, cardiovascular activity, haemocirculation, cerebral metabolism, acid-alkali and water-electrolyte balances.

In addition to the described above, there may be *generalized tonic seizures*, typical for children, and *generalized clonic seizures*, more common in infants, as well as myoclonic seizures characterized by bilateral synchronous manifestations, which are most vividly expressed in the shoulder girdle and arms. With lightning speed, the arms would bend and the fingers part. If the seizure involves the legs, usually they bend too, and the patient would fall down to his knees or even on the ground.

Symptoms of ***partial seizures*** depend upon the localization of the focus. There are motor, sensory, autonomic-visceral seizures and those with disruptions of psychic functions. The most typical partial motor seizure is jacksonian one in the form of a local jerk or tonic tension in the muscles of the arm or leg, more frequently in its distal parts; the convulsions may spread along the whole extremity with involvement of the muscles of the trunk, face, the other extremity, often resulting in a secondary-generalized spasmodic seizure with loss of consciousness.

Seizures with disruption of psychic functions may have the following manifestations: an absolute or partial paroxysmal motor or sensory aphasia; difficulties in articulation of words and use of speech with preservation of the movements of the muscles necessary for speaking; short-term complex illusions when there is a violation in the assessment of the degree of novelty of the real life situation; an absolute amnesia within a certain, sometimes rather prolonged (a few hours) period of time within which the consciousness was clear and the behavior absolutely adequate; disturbances of thinking when the patients notice that their "thoughts are running or scattering with an unbelievable speed", "they are difficult to follow" or, on the contrary, "the thoughts stick", the thinking becomes retarded, "stiff"; short-term paroxysmal emotional disorders in the form of unpleasant emotional feelings, or sharply expressed fears, anxiety, visual, auditory, olfactory and gustatory illusions; visual hallucinations, usually colored, represented by motionless pictures or scenes with a decelerated or accelerated action; auditory hallucinations (significantly more seldom).

Contraction-free paroxysms are short-term mental disorders developing as a seizure equivalent. The following kinds ofcontraction-freeparoxysms are distinguished:

- ✓ *twilight disturbance of consciousness*, accompanied by anxiety, terror, excitement, aggressiveness with a subsequent amnesia; here the patients may have visual, olfactory or auditory hallucinations, delusions of persecution, universal death, grandeur, reforming;
- ✓ *delirious state* with vivid visual hallucinations and tense affect;
- ✓ *oneiroid state* with a fantastic content of the feelings;
- ✓ *ambulatory automatism* in the form of short-term automated actions with an absolute estrangement from the surroundings, a disturbance of consciousness and a subsequent amnesia;
- ✓ *fugue* – a state of cloudiness of consciousness when the patients, estranged from their surroundings, would strive for running somewhere;
- ✓ *trance* – a prolonged disturbance of consciousness when the patients would move automatically, make unmotivated journeys or trips, sometimes at long distances;
- ✓ *dysphoria*, manifested by depression, melancholia, anxiety, maliciousness, tension, aggressive behavior;
- ✓ *specific states*, in the form of depersonalization and derealization with phenomena of metamorphopsiae accompanied by fear, melancholia, anxiety, hallucinations.

***Personality changes in patients with epilepsy*.** The course of epilepsy is accompanied by formation of peculiar changes (of the epileptic character) in the personality of the patients, manifesting themselves by egocentrism, a combination of obsequiousness and sugariness with maliciousness, cruelty, vindictiveness, rancour, a so-called polarity of the character. The patients' sphere of interests gets narrowed; they become pedantic, fault-finding, with a tendency towards sudden dysphoric reactions. These patients are characterized by affective torpidity, i.e. sticking to negative emotions, offences, maliciousness which they accumulate in their consciousness; later there is an affective discharge in the form of a sudden aggression with unharnessed energy. In this state the patients are dangerous for their associates. A combination of affective torpidity, explosiveness and polarity of affects in epileptics gives rise to prolonged vindictive tendencies, which persist for years and often end with aggression.

A protracted course of the illness develops epileptic dementia characterized by a change in the thinking, a tendency towards detailing and torpidity, the patients are not able to separate the main things from minor ones. The thinking becomes concrete; there are disturbances of memory and a decreased stock of words. Diminutive and hypocoristic suffixes appear in the patient's speech.

Epileptic psychoses. In epilepsy, acute and protracted psychoses may develop; they are observed in about 2–5 % of epileptics. The course of acute psychoses may include cloudiness of consciousness (twilight, oneiroid, delirium, amentia) or be without it (acute affective and hallucinatory-paranoid states).

The most common form of acute psychoses with cloudiness of consciousness is a twilight state, which develops after a series of spasmodic seizures and is accompanied by excitement with an mental stress and aggression. Epileptic oneiroid is characterized by vivid fantastic hallucinations accompanied by various emotional feelings: fear, horror, delight.

The most common transitory psychoses without any cloudiness of consciousness are depressive-dysphoric states with a melancholic-malicious mood, delusions of reference, persecution, an increased aggressiveness and excitability. Rarer are depressive states with inhibition, as well as irate and merry maniae. Acute hallucinatory-paranoid psychoses develop vivid imagery delusions, as well as verbal and visual hallucinations. Acute epileptic psychoses are transitory, their onset is acute, the recovery is critical, and they last from a few hours to 1–2 weeks.

Acute psychoses

I. With cloudiness of consciousness (to several day)	– twilight state – after a series or spasmodic seizures – continue to several day – hallucinatory and delirious disorders – psychomotor excitement, aggression – epileptic delirium – epileptic oneiroid
II. Without cloudiness of consciousness (more then one day)	– acute paranoid – dysphoric psychos

Protracted epileptic psychoses originate at remote stages of the disease, 12–14 years after its manifestation. Their duration is from several months to a year or even more. The development of protracted psychoses is accompanied by a decrease in the rate of seizures or their discontinuation, as well as by normalization of EEG. The recovery from this psychotic state is lytic, with possible recurrences of the psychotic symptoms. Paranoiac psychoses develop interpretative delusions with an ordinary content whose plot is connected with actions of concrete people and certain psychotraumatizing situations. More common, if compared with others, are ideas of reference, persecution, poisoning, jealousy, the patients being rather frank when they inform about their delirious feelings. In hallucinatory-paranoid psychoses, delusions are formed on the basis of verbal hallucinosis. In some cases, the structure of the main syndrome includes psychic automatisms, mentism. Sometimes in epilepsy there is formation of paraphrenic psychosis with megalomanic delusions having a fantastic content, and with some peculiar interspersing of real events accompanied by enthusiasm. Much less common are catatonia-like states in the form of substupor, mutism, impulsive behavior.

Protracted epileptic psychoses (schizophrenic like)

General characteristics:

– they develop after 12–14 years of disease
– tendency towards progradiency;
– with rood change of personality, decrease of intellect;
– most of time without disorders of consciousness;
– they duration is from several months to several years;
– more often with temporal localization of focus.

1. Paranoiac.
2. Hallucinatory-paranoid.
3. Paraphrenic.
4. Catatonia-like states.

The diagnosis of epilepsy is made on the basis of the following signs: recurrent seizures, changes in the personality, a tendency towards progradiency. Very important signs of the illness are changes on EEG: 1) spikes (peaks); 2) sharp waves; 3) a sharp and a slow wave; 4) a spike and a wave with a frequency of 3 seconds, they are characteristic of typical absences (petit mal); 5) multiple spikes followed by a group of slow waves; 6) slow high-amplitude complexes: a sharp wave and a slow wave (characteristic of atypical absences).

The treatment of epilepsy must be complex, regular and prolonged. The multimodality treatment should include anticonvulsant dehydration, resolving and general health improving therapy. Prior to the beginning of the treatment it is necessary to specify the etiology of epilepsy and the type of seizures. If possible, the treatment should be provided with one optimally chosen drug preparation, whose dose would be gradually increased up to the absolute discontinuation of the seizures or to the appearance of any side effect of the drug. Two or more drugs are administered only in case of an insufficient efficacy of the monotherapy owing to an improper choice of drugs, their extremely low doses or an irregular taking.

When treating epilepsy, it is important to reveal the factors contributing to the appearance of seizures, to timely make necessary corrections in the course of the treatment, for instance if any concomitant diseases develop. It is necessary to regulate the way of life, establish a regular regimen of sleep and wakening, avoid any psychoemotional overstrains, limit the patients' watching TV programmes and working in front of a computer monitor. It is important to exercise self-control over taking antiepileptic drugs. Epileptics should follow a milk-vegetable diet, restrict the intake of liquids, salty and spicy foods, meat; the use of strong tea and coffee should be reduced and alcoholic drinks absolutely excluded. In order to treat mental disorders in epilepsy, neuroleptics, tranquillizers and antidepressants are administered.

The epileptic status should be controlled, if possible, under in-patient conditions. At first, Diazepam (Sibazon, Lorazepam) is administered IV slowly by 10–20 mg of 0.5 % solution in 20 ml of 40 % glucose. If there is no effect, the administration of Diazepam is repeated 1.5–2 hours later. If the status is not controlled, a slow IV infusion of 40 ml of 2.5 % solution hexenal or sodium thiopental is made (1 g is diluted in 40 ml of NaCl isotonic solution) at a rate of 1 ml per 10 kg of the patient's body weight. Simultaneously, 5 ml of 10 % solution of sodium thiopental or hexenal are injected IM.

Simultaneously with antispasmodic drugs, a lytic mixture is administered: 2 % trimeperidine hydrochloride – 1 ml, 25 % analginum – 2 ml, 1 % diphenylhydramine hydrochloride – 2 ml, 0.5 % novocaine – 2 ml IM.

Antiepileptic drags

Active substances	Dosages
Acidum alproicum	500–3000 (1000) mg per day
Carbamazepinum	400–2000 (600–800) mg per day
Phenobarbitalum (benzobarbitalum)	60–240 (120) mg per day
Phenytoinum	100–700 (300) mg per day
Lamotriginum	100–800 (200–400) mg per day
Topiramatum	100–1000 (200–400) mg per day
Clonazepamum	2–8 (2–4) mg per day
Gabapentinum	1200–4800 (2400) mg per day
Pregabalinum	150–600 (300–450) mg per day
Leetiracetamum	1000–4000 (2000–3000) mg per day
Oxcarbazepinum	300–2400 (900–1200) mg per day
Lacosamidum	100–400 (200–300) mg per day

With the purpose of dehydration, the following drug preparations are administered: 2 % furosemid (Lasix) – 2 ml IM; mannitol with urea by 0.5 g/kg of the patient's body weight in 140 ml of 10 % glucose IV by drops at a rate of 40 drops per minute; ethacrynic acid (Uregit) – 50 mg IV; prednisolone – 1–2 ml IM; Contrical or Trasylol by 10,000-30,000 units in 500 ml of NaCl isotonic solution IV by drops during 4 hours.

With therapeutic and diagnostic purposes, a spinal puncture is made. In order to improve the cardiac activity, 1 ml of 0.06 % corglycon or 0.5–1.0 ml of 0.025 % digoxin IV are slowly administered.

If blood pressure increases, papaverine by 1–2 mg/kg of the body weight, 25 % magnesium sulphate by 10 mg IV + 5 ml of dibazole IV, 5 % pentamine (0.5–1.0 mg) in 20 ml of 40 % glucose IV are slowly administered.

Drags for treatment of mental disorders in patients with epilepsy

Active substances	Dosages
Neuroleptics	
Olanzapinum*	5–25 mg per day
Risperidonum*	0,5–6 mg per day
Quetiapinum*	500–600 mg per day
Amisulpridum*	50–800 mg per day
Antidepressants	
Sertralinum*	25–100 mg per day
Citalopramum*	10–40 mg per day
Paroxetinum*	10–30 mg per day
Escitalopramum*	5–20 mg per day
Venlafaxinum*	75–225 mg per day
Hypnotic drags	
Zopiclonum	3,75–15 mg per day
Zolpidemum	5–10 mg per day
Zaleplonum	5–10 mg per day

Control questions

1. List mental disorders in the remote period after traumatic brain injury.

2. What features of organic disorders of CNS lesions in HIV – infection?

3. Describe personality changes in patients with epilepsy:

4. Enumerate contraction-free paroxysms:

5.Give characteristic of an epileptic dementia:

Tests

1. A 58 year-old patient diagnosed with epilepsy gradually develops emotional dullness, pathological details, viscosity, reduced intelligence. Name the state.

A. Epileptic dementia.
B. Schizophrenic dementia.
C. Post-traumatic dementia.
D. Vascular dementia.
E. Senile dementia.

2. In the Intensive Care Unit from the street delivered to a man who has up to 15–20 seizures per hour, in the intervals between attacks the patient is in a state of deep torpor. Cyanosed skin, blood pressure 170/100 mm Hg. Art., pulse 140 per minute, temperature 38 degrees. What do we need to administrate first ?

A. Diazepam I/V
B. Kordiamin I/M and Corglikon I/V
C. Lasix I/M
D. Analgin I/V and diphenhydramine I/V
E. All of the above

3. A 12-year-old boy periodically has short episodes (10–15 seconds) of a brief loss of awareness with a dazed look and eyes stare in an upright position, blank expression of face, absence of motions and subsequent amnesia. Specify the described state:

A. Fugue
B. Obnubilation
C. Trans
D. Absence seizure
E. Sperrung

4. Ambulance was called to a 48 y.o. man. From the words of relatives he has had three episodes of lost consciousness and attacks during the day. On examination: the following fit is observed: patient is unconscious, fell on the floor, tonic and then clonic convulsions of trunk and extremities happened. The attack lasted for 4 minute, ended by involuntary urination. What type of attack was observed?

A. Major epileptic seizure
B. Vegetatic crisis
C. Absence
D. Episode of hysteria
E. Fainting

5. An emergency doctor has diagnosed a 32-year-old woman with generalized convulsive status epilepticus. The deterioration in the patient's condition is caused by a sudden gap in the epilepsy treatment. Specify the doctor's further tactics:

A. Hospitalization in the intensive care unit
B. Hospitalization in the department of neurology
C. Hospitalization in the department of neurosurgery
D. Outpatient monitoring by a neuropathologist
E. Outpatient monitoring by a neurosurgeon

Tasks

1. A 30 years-old patient with epilepsy: a suddenly appearing and unmotivated disorder of emotions characterized by a strained, depressed and malicious mood with an expressed irritability and inclination to affects of anger with aggression. The patient constantly offers the medical personnel to help. What disorder of emotional does the patient have? What treatment must you prescribe?

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2. A 27 years-old patient after series generalized tonic-clonic seizureshas developed disorientation in self-personality and surrounding. Present awesome hallucinations, religious-mystic delusions. His feelings are accompanied by wild emotional disturbances in the form of fear, frenzied. A patient with motor excitement in the form of senseless destructive actions directed at the surrounding people. What disorder of consciousness does the patient have? Proof it.What is the treatment?

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CLASS № 5.
MENTAL AND BEHAVIORAL DISORDERS DUE TO ALCOHOL ABUSE. MENTAL AND BEHAVIORAL DISORDERS DUE TO NARCOTICS AND SUBSTANCES THAT ARE NOT INCLUDED IN THE STATE LIST OF NARCOTICS ABUSE. NON-CHEMICAL ADDICTIONS

MENTAL AND BEHAVIORAL DISORDERS DUE TO ALCOHOL ABUSE.

Alcohol – the most commonly used psychoactive substance.

Alcoholism – a chronic mental illness caused by alcohol abuse, characterized by a pathological attraction to alcohol and the emergence of physical and mental disorders.

According to WHO, in the world are 120 million patients with alcohol dependence and alcoholism prevalence of 2 %. In recent years there has been a clear trend of alcohol abuse and alcoholism growth in many industrialized countries, where the number of alcoholics is 7–10 % of the population. The problem of alcoholism is one of the major in the world.

Alcoholic drinks have a bipolar effect: causing euphoria and relieve emotional stress. Repeated intake of alcohol is fixed conditioned reflex desire to remove them emotional stress, and the reception of alcoholic beverages becomes a habit. This is facilitated also the fact that the gravity of the conflict that caused the stress is removed, not only for the duration of alcohol, but also for a certain period of time thereafter. In addition, alcohol is a "social catalyst" that facilitates interpersonal communication.

The degree of alcoholization of society depends on economic and social relations in it. Socio-psychological function of alcohol is reduced to improve the illusory satisfaction of personal needs.

The highest peak of drinking between the ages of 20–40 years.

Classification of alcoholic mental disorders

I. Acute alcoholic intoxication
   1. Simple alcoholic intoxication
   2. Pathologic intoxication

II. Habitual alcoholism

III. Chronic alcoholism

IV. Metalcoholic psychoses

Acute alcoholic intoxication is a symptom complex of mental, autonomic and neurological disorders caused by the effect of liquor. The latter easily passes through biological membranes mixing with water and easily dissolving in fatty solutions. Its absorption into the blood begins as early as in the oral cavity, it is even more rapid in the stomach and intestines; with the blood, liquor spreads all over the organism.

Simple alcoholic intoxication is the most common kind of acute alcoholic intoxication. Here the degree of expressiveness and the forms of mental, neurological and autonomic disorders depend upon the amount of spirits taken, sex, age, somatic state, mental peculiarities of the personality, its emotional state, the strength of the drink and the form of its taking.

There are three degrees of severity of alcoholic intoxication: mild, moderate and severe.

The mild degree of simple alcoholic intoxication develops if the alcohol concentration in the blood is within 20–100 mM/l (20–100 mg of alcohol per 100 ml of blood) and is characterized by a reduced active inhibition. Feelings of mental and physical comfort appear. The mood rises, people develop a desire to talk much, they feel cheerfulness and a surge of energy, their social contacts become easier. In this state, shy and unsociable persons would easier start conversations with strangers, joke, laugh. Troubles are endured easier and calmer. Subjectively a person in the state of mild intoxication feels some rise in his capacity for work, but this feeling is delusive, as the attention is not concentrated, it is easily distracted, the rate of thinking accelerates, but the associations are superficial. The scope and quality of the work done decrease, the number of mistakes increases, the critical assessment of one's own state being significantly reduced.

The moderate degree of simple alcoholic intoxication develops if the alcohol concentration in the blood is within 100–250 mM/l and is characterized by a reduction in the process of excitement. The mood changes: the person develops excessive touchiness, short temper, dissatisfaction with what

is taking place, all these things determining the drunkard's statements and acts. His ability to correctly assess what is taking place decreases, and it often results in improper, sometimes illegal actions. The process of thinking becomes slower, the statements are trivial, the speech is slurred with perseverations, the drunkard feels it difficult to choose words and develops dysarthria. The threshold of acoustic perception elevates, therefore the speech becomes loud. It is difficult to switch attention to other things, the handwriting is roughly affected, ataxy develops, the movements become uncoordinated, the sensitivity to pain and temperature weakens. Hyperemia of the face gives place to cyanosis and paleness. Some people develop nausea and vomiting. The moderate degree ends with profound sleep followed by asthenia.

The severe degree of simple alcoholic intoxication develops if the alcohol concentration in the blood is within 250–400 mM/l. It manifests itself by disturbance of consciousness from torpor, somnolence to coma. Expressed neurological disturbances, ataxia, muscular atony, dysarthria and amimia are present. Vestibular disturbances (nausea, vomiting, dizziness, a feeling of tinnitus) develop. The acuity of vision decreases, the orientation in the place is affected. Patients suffer from psychosensory disorders and illusions. The cardiac activity becomes weaker, the blood pressure and body temperature fall. Any interest to one's associates is lost. The intoxicated person looks sleepy and soon falls asleep with narcotic sleep, sometimes in awkward positions and improper places. If the blood concentration of alcohol approaches 700 mM/l such people may die because of respiratory paralysis.

Treatment of acute alcohol intoxication: Medical treatment for alcohol poisoning: gastric lavage, administration n / a 0.25–0.5 ml of apomorphine hydrochloride to induce vomiting, bladder catheterization in the case of urinary retention. In comatose – administering cardiac drugs, in / 100 mg pyridoxine (vitamin B6), and 1000 ml of saline with 40 % glucose. With strong motor excitation recommended vitamin B12 50–100 mg, barbiturates are contraindicated.

In cases of severe coma – venipuncture with the withdrawal of up to 200 ml of blood, c / saline – 800–1000 ml. Asphyxia – oxygen inhalation artificial respiration tsititon (1 ml solution of 0.15 % w / w), lobeline (n / k 1 ml of 1 % solution), inhalation of a mixture of 90 % oxygen and 10 % carbon dioxide. Recommended general and local warming. When mild to moderate intoxication – inside the 10 to 15 drops of ammonia per 100 ml of water.

Pathological intoxication

Pathological intoxication is acute psychotic states occurring after administration of different doses of alcohol, often small and is a kind of idiosyncratic habits.

Suddenly developing a twilight state of consciousness, it becomes disturbing drunk suddenly confused, completely disoriented in the environment, the patient experiences manifest themselves in scanty remarks and behavior, while retaining the ability to do quite complex actions. Under the influence of painful experiences (hallucinations, delusions), the patient often makes aggressive actions aimed at accident bystanders.

Ends pathological intoxication suddenly, often goes to sleep. In the subsequent complete or partial amnesia.

Habitual drinking – a habit that can go into alcoholism. The main indicator of domestic drinking – frequency and quantity of alcohol consumption as a means of resolving the psychological, social and biological problems. This form of alcohol abuse and consider how prenosological. Stage of alcoholism, but not all alcoholics develop alcohol dependence. Nevertheless, alcohol abuse increases the risk of alcoholism.

Chronic alcoholism. Alcohol needs of developing different people at the same pace, it depends on the characteristics of the individual, his moral and ethical attitudes, customs micro social environment, preferably this method of relaxation in front of others.

Deepening of the main symptoms that characterize the habitual drinking leads to alcoholism. Patients with signs of alcoholism are formed Abuse Syndrome, of which common to all forms of the disease are pathological desire for alcoholic beverages, alcohol withdrawal syndrome and alcohol degradation of the individual.

The pathological craving for alcohol Pathological desire to alcohol displaces other interests and motives, it can not be suppressed by the patient and drunkenness becomes an end in itself, and the quantitative and lost situational control of the intake of alcohol. Patients drink alcohol, regardless of the circumstances (working hours, the possibility of sanctions, the wrong place, etc.) and usually at doses causing intoxication, because they have no sense of alcohol saturation occurs.

Alcohol withdrawal syndrome – a complex of autonomous, somatic-neurological and psychiatric disorders that occur in patients with alcoholism during abstinence from alcohol after a prolonged and massive drinking. Clinic of alcohol withdrawal syndrome consists of post intoxication symptoms and symptoms characteristic of alcoholism.

Among the post intoxication disorders are most frequent such as: headache, dizziness, weakness, fatigue, excessive thirst, dry mouth, loss of appetite, diarrhea, increased blood pressure, unpleasant sensations in the heart, stomach, bad mood, working capacity decrease. These violations occur not only in patients with alcoholism, but every abusing alcohol in the post intoxication period. Patients with alcoholism symptoms described are usually combined with restlessness, dysphoria, irritability, a strong desire to get drunk. In a state of alcohol withdrawal present signs of chronic intoxication of CNS: disturbed sleep with vivid, unpleasant dreams, hyperacusia, hypnagogic, and sometimes separate the true auditory and visual hallucinations, ideas of reference, guilt, self-abasement, a large sprawling hand tremor, the language, the whole body sweating, tachycardia, nystagmus, some patients – seizures.

Abstinence syndrome in alcoholism occurs after 6–48 hours after the last use of alcohol and lasts from 2–3 days to 2–3 weeks. As a result of the above changes occur disturbances in the vital organs and systems, which can cause death.

Features of alcoholic mental degradation

Changing personality in alcoholism is determined by the stage of disease.

In the early stages usually sharpening premorbid personality traits, the most common are their types.

The moral and ethical decline is due to emotional and psychopathic disorders. Emotional disturbances are expressed in mood lability, touchiness, pessimism with an artistic demonstration of their feelings, irritability, outbursts of anger and irritation. There is an emotional brutalization, reducing criticism. Alcoholics careless, underestimated the difficulties tend to be flat humor. They have a sense of distance disappears, understanding of behavior in different situations. Some develop short-term periods of depression.

In the structure of the individual degradation in alcoholism moral and ethical decline occurs early and is compounded as the disease progresses. In the circle of companions alcoholics cheerful, carefree, boastful, do not hesitate to talk about intimate aspects of their lives and the lives of loved ones, laugh diseases and misfortunes of his family members. They are false, cynical, inclined to the flat monotonous jokes. Houses take extra rude and irresistible alcoholics, they are aggressive toward their parents, wives, children, exposing them sometimes sophisticated torture.

Alcoholics carry out their professional responsibilities superficially, trying to evade them, but at the same time receive a financial reward. Fading interest in creativity, reduced self-esteem. Many of them lose their jobs, families, apartments, livelihoods and at the same time not blame yourself, and other people or negative circumstances.

On the remote stages of the disease are noticeable features of intellectual-mental decline, although pronounced dementia it comes not at all.

Stages of alcoholism

In clinical practice, step 3 is isolated in diagnosis of alcoholism: primary (I), medium (II) and the final (III).

The first (initial) stage of alcoholism

For this initial stage is characterized by an abnormal craving for alcohol, reducing the quantitative control, height tolerance, alcoholic amnesia. In half of cases of the I-st stage alcoholism formed in individuals younger than 25 years, in others – 25–35 years, and very rarely – an older age. The duration of 1 year to 6 years.

The pathological inclination to alcohol at this stage is shown in the most mild form usually in situations where traditionally occur booze.

Tolerance to alcohol increases 2–3 times, disappears gag reflex overdose, there is a transition from weaker to stronger drinks. Withdrawal phenomena are absent. The negative social consequences of increasingly limited family quarrels, slowdown in promotion at work.

The second stage of alcoholism.

Its main diagnostic feature – abstinence syndrome. In addition, all exacerbated by the symptoms characteristic of the I stage. II stage of alcoholism is formed in 25–35 years, its duration in 2/3 patients less than 10 years, 1/3 – 10–15 years.

The primary pathological attraction to alcohol is often at this stage arises spontaneously.

Quantitative control is lost, the individual receiving the usual dose leads to an irresistible attraction to continue to drink.

Tolerance to alcohol reaches a maximum, and for several years remains constant, exceeding the initial 5–6 times. High doses are used either simultaneously or fractional throughout the day.

Sharpens the premorbid personality traits. There are features of alcohol degradation (coarsening of emotions, anxiety, insufficiently critical attitude towards themselves). The social consequences in the II stage of alcoholism vary from subtle to deep, characterized by severe maladjustment. Half of the patients will not be saved marriages, they often lose their previous qualifications.

The third stage of alcoholism

Craving for alcohol in this phase takes on the character invincible, it arises spontaneously. This attraction reminiscent of hunger or thirst. Loss of control is accompanied by a quantitative loss of situational control. Any, the smallest dose of alcohol causes an irresistible craving for alcohol with the desire to get it at any cost, even by illegal means. Patients consume alcohol alone or in the company of random individuals, often in inappropriate places. There is a lower tolerance to alcohol.

In the III stage of alcoholism are formed rough, often irreversible pathological changes in the body.

Somatic and neurological disorders in alcoholism

Epidemiological studies found that the diseases of internal organs occurs in one in four of the alcoholic and the overall incidence of people who abuse alcohol is twice higher than that of those who drink rarely and little. The most characteristic of alcoholism is a fatty liver and polyneuropathy. However, there is no one system of the body, that would not be violated under the influence of alcohol. Somatic symptoms of alcoholism and the neurological occur at different stages of disease.

Dipsomania

Dipsomania (true drinking bout) – periodic (in the form of hard drinking) alcohol abuse in patients who are not suffering from alcoholism. Zapoyu precedes anxious – depressed mood, sleep disturbance, anorexia, headache. Binge duration from a few days to a week. Ending his sudden, it disappears when the need for alcohol and even appear aversion to it.

Features of alcoholism in women.

In recent years, a trend towards an increase in the incidence of alcohol abuse among women.

The most significant determinant of women's alcoholism is a family history of alcoholism and other mental illnesses. These figures are significantly higher than in the group of male alcoholics.

Women from the beginning try to hide their drinking, they prefer to drink either in private or in isolation, without attracting attention. They are faster than males appears alcohol dependence, abuse from the beginning until the withdrawal are 3–5 years old, quickly lost quantitative control. Daily doses range from 350–500 ml 500–700 ml of wine or to 1–1.5 and even 2 l of strong alcoholic drinks.

Women have shorter stages of alcoholism, and mental and physical disorders and the greater is faster than that of men, there is no well-defined disease phases and one phase as it overrides another. Women have formed early in the withdrawal syndrome and severity of mental disorders when it is greater than the vegetative.

Signs of degradation occur in women earlier than men, which is more profound than that of men: disappear the higher moral and aesthetic emotions, these women leave work, family, do not care about the children and elderly parents, are immoral lifestyle, promiscuous dating institution, in sexual relations. They rarely agree to be treated for alcoholism and is usually not configured to complete discontinuation of alcoholic beverages. Somatic disorders in alcoholism in women occur more frequently than men, they have 2 times more likely to cirrhosis of the liver, hepatitis, neuritis, alcoholic pellagra. Infertility is often observed, stillbirth, birth of children with disabilities.

Features of teenagers' alcoholism.

Alcoholism can be formed in adolescence (14–18 years) or adolescence (18–20 years).

Clinical manifestations, course and outcomes of early alcoholism different malignancy.

In adolescents and young adults increased sensitivity to alcohol, they get drunk on smaller doses than adults, they have more pronounced euphoria, accompanied by unfocused hyperactivity decreases rapidly control the dose of alcohol, as well as social control, they use mainly fortified wines.

The main features of alcoholism in teenagers and young adults – a rapid development of the disease, the lack of severity of symptoms, the difficulty in distinguishing the stage of disease, the rapid development of the degradation of the individual, leading to social exclusion of patients.

In adolescence, dependence on alcoholic beverages is formed by 2–4 years.

The pathological attraction to alcohol occurs in 1–1.5 years from the beginning of the abuse.

Craving for alcohol is formed faster than in the past initiated its use, often teenagers do not realize occurs attraction. On an unconscious attraction proves liveliness of the sick at the mention of drinking, they were willing to report various details of drinking, are more active in seeking to obtain alcohol. The younger the patient, the earlier attraction becomes irresistible, and occasional drunkenness quickly becomes a regular. Step domestic drinking for many is virtually absent.

The main feature of the first stage of alcoholism in teenagers is the formation of individual psychological dependence. Drink becomes important in the life of a teenager, he had other interests disappear. Teens throw study, do not hesitate to appear drunk in public places, can produce alcohol illegally. They drink a few times a week, regardless of whether the company has companions. Alcohol becomes the means necessary to maintain optimum health.

Rapidly growing tolerance to alcohol, disappears protective gag reflex overdose weaker drinks are replaced by more robust.

Adolescents in the 1st stage of alcoholism are often observed symptoms that are usually characteristic of the 2nd stage in adult patients: palimpsests, change the picture of intoxication, expressed somatic disorders.

Withdrawal symptoms manifest vegetative symptoms with asthenia, fatigue, headache, dyspepsia, anorexia, insomnia. Mental symptoms of withdrawal are less pronounced. Often there are subdepressive states. Neurological symptoms including tremor, no. withdrawal phenomena last from several hours to 3–5 days, but in the subsequent 2 months retained a strong craving for alcohol, which subordinates the behavior of patients.

They rather quickly formed and the degradation of the individual gross social exclusion. Teens usually leave school, spend time in anti-social companies, they are easy to draw a variety of criminal acts, many commit suicide. In adolescence and early alcohol abuse prevalent defeat emotional and volitional.

The etiology and pathogenesis of alcoholism

It is well known that the main reason alkogolizma- alcohol abuse, but even the regular use of alcohol does not always lead to alcoholism and, in some cases after the first of drinking alcohol dependency arises. It can therefore be considered justified statement that alcoholism is a multifactorial disease and polyetiological.

Along with the specific influence of alcohol in the etiology of alcoholism are important social, psychological and biological factors alone.

Social factors predisposing to the development of disease – is drinking customs, public attitudes towards alcohol consumption, social status, economic security, education, marital status, ethnicity, and religious affiliation.

The role of psychological factors is confirmed by the high frequency of alcoholism in psychopathic personalities that differ insufficient adaptation to the social environment, they are primitive, insecure, dependent and addicted to negative leaders.

Individually-biological factors of alcoholism is primarily determined by heredity. Scientific evidence indicates that the risk of alcoholism in first-degree relatives in the 7–15 times higher than in the population, the risk of getting in identical twins is 2–2.5 times higher than fraternal. The role of heredity can be carried out directly via the particular enzyme system responsible for the metabolism of alcohol in the body, and through the inherited personality traits that predispose to alcohol.

Among the biological factors play an important role alcoholism residual effects of organic lesions of the central nervous system, delays and deviations in somatic and sexual development, chronic and acute diseases which provoking asthenia, neuroticism and neuropathy in childhood and early introduction to low-grade distilled spirits.

The pathogenesis of alcoholism is complex, the most important in recent years, given the impact of acute and chronic alcoholic intoxication on the function of neurochemical systems in the brain – the dopaminergic, serotonergic and GABAergic. It is believed that alcohol affects all (or many) neu-

rotransmitter system of the brain. The mechanism of addiction alcoholism has a lot to do with drug addiction – is the effect on catecholamine (dopamine) mediation. Alcohol enhances the release of neurotransmitters from the depot, which leads to the depletion of stocks and the deterioration of health, and this causes the desire for a new reception of alcohol. The connection between the exchange and catecholamines endorphins indicates an important role in the formation of alcohol dependence endogenous morphines.

The mechanism of toxic effect of alcohol to the central nervous system can be explained by the fact that it is a membrane-lipophilic substance.

The role of liver enzyme alcohol dehydrogenase (ALDG), which promotes the oxidation of alcohol. The disadvantage of this enzyme that develops in alcoholics due coarse human liver, leads to the accumulation of acetaldehyde in blood which has a toxic effect on the brain.

Treatment of alcoholism

Given that alcoholism is a disease polyethiological, which are involved in the pathogenesis of many factors, treatment of these patients should be long-term and continuous, the most differentiated, complex, begin at the early stages of alcoholism.

Treatment of alcoholism is conducted in several stages:

Step I – the treatment of acute and subacute symptoms of the illness resulting from alcohol intoxication (binge interruption, arresting abstinence).

Step II – reconstructive therapy aimed at normalizing somatic and neurological functions, as well as the fight against addiction to alcohol.

Step III – rehabilitation of patients, stabilizing therapy aimed at maintaining remission and preventing relapse.

The first stage of treatment must be preceded by a full open alcohol intake, as a gradual reduction in dose for the patient goes harder.

In order to develop a strong aversion to alcohol apply conditional reflex, sensitizing therapy and psychotherapy.

Negative (vomit) reaction to the sight, smell and taste of alcohol produced in the process of conditioned reflex therapy. As reinforcing agents use different emetics. Most often used for this purpose apomorphine, as well as other emetics: emetine, thyme.

The fight against the craving for alcohol is carried out with the help of sensitizing therapy, the essence of which is to provide a chemical barrier, making it physically impossible alcohol intake. Sensitization habits caused by taking antabuse (teturam, disulfiram, esperal), metronidazole (Flagyl, Trichopolum) furadonine, furazolidone.

Prophylactics of alcoholism

A primary prophylactic of alcoholism requires a combination of administrative, legal and health and hygiene measures. Activities of administrative and legislative measures – is the administrative, legal and educational measures aimed at strengthening the fight against alcohol. Medical and preventive measures – it is carrying out extensive explanatory work among the population through the mass media. It is necessary to fight with tradition, starting from childhood.

Secondary prophylactics – is the early recognition and early treatment of alcoholism, it is necessary to recognize and overcome opposition to the treatment of patients.

Tertiary prophylactics – is the delay of coarse, irreversible violations in alcoholism.

MENTAL AND BEHAVIORAL DISORDERS DUE TO NARCOTICS ABUSE

Addiction (Narcomania) – diseases caused by the use of substances included in the state list of drugs that manifest mental and sometimes physical dependence on these substances, tolerance to them and expressed medical and social adverse effects.

In Ukrainian Narcology, drugs are the substances which are included in the official list of drugs approved by the Minister of Health, and the abuse of substances not listed in the drug list, defined as abuse. From a clinical and medical sides of the approach to patients with drug and substance abuse, as well as the principles of their treatment are identical. The differences are determined by a legal criterion which is absent in substance abuse, as a manufacture, sale, storage, transportation of these substances are not regarded as criminal acts.

According to the World Health Organization (WHO) "anesthesia" of the world population continues to grow, according to official data in the world, there are over 1 billion people who use psychoactive substances, among them – 50 million addicts. According to the WHO European Office for Europe nearly 16 million drug addicts.

The clinical manifestations and course of drug addiction

Acute intoxication with the drug

Narcotic "intoxication" is characterized by a subjectively positive for the human feelings: improving mood, it becomes a peaceful, complacent with no real improvement in the situation. Problems at the time dezaktualiziruyutsya, but not eliminated. Such a pleasant subjective effects the drug has only at the beginning of the disease, and subsequently received only a drug to prevent withdrawal, restore and improve efficiency.

Each drug is characteristic of his state of intoxication, which is often accompanied by a disturbance of consciousness, thinking and perception.

The first use of a drug sometimes cause the protective reaction of the organism in the form of itching, nausea, vomiting, dizziness, profuse perspiration, which disappear on subsequent receptions.

Acute drug intoxication depends on the mode of administration of the drug, external interference, physical and mental condition to take the drug.

Drug abuse without dependence on them is not an addiction and domestic Addiction is defined as the addictive behavior – is the abuse of various substances that change the mental state before formed a dependency on them.

The clinical picture of narcomaniae is mostly represented by three basic syndromes: mental dependence, physical dependence and tolerance for a narcotic.

Mental dependence is characterized by a pathological striving for taking a narcotic constantly or periodically. It develops in all cases of a systematic taking of narcotics, but sometimes it may appear as early as after the first dose of a narcotic. The patient strives for taking a narcotic in order to have pleasant feelings or eliminate phenomena of some discomfort. The drive for a narcotic may be obsessive or compulsive. In the obsessive drive, the patient constantly has thoughts about a narcotic accompanied by animation, high spirits with eager anticipation of its taking, or depression and dissatisfaction when it is not available. The compulsive drive is characterized by an irresistible striving for a narcotic, it determines the patient's behaviour and motives of his actions with an absolute absence of criticism. This drive may develop in abstinence or at the height of intoxication, in the latter case there may be overdosage of a narcotic.

Physical dependence is the state of reconstruction of all functions of the organism in response to a chronic use of narcotics manifested by severe mental and somatic disorders after discontinuation of the effect of a narcotic. The resultant abstinence syndrome is alleviated or absolutely controlled by next taking of a narcotic. Clinical manifestations, terms of formation and duration of the abstinence are different in different kinds of narcomaniae. It should be noticed that physical dependence develops in cases of a chronic use of many, but not all the narcotics.

Tolerance is the state of adaptation to narcotics manifesting itself by a constant reduction of a response to taking its usual doses. In the process of the development of the illness there is an increase of tolerance when the addict's organism can tolerate doses of a narcotic several times exceeding therapeutic and even lethal ones. The increase of the tolerance results in higher doses and rates of taking narcotics. At a certain stage of the disease the tolerance reaches to its maximum and remains constant for a long period of time. Later there is a reduction of the tolerance, and taking of usual doses causes overdosage, often with the lethal outcome.

In the course of narcomaniae, 3 stages are distinguished. In the beginning, there is an episodic taking of narcotics, when there is no definite rhythm of narcotization and a change of the tolerance yet.

Stage I (the initial stage) – formation of mental dependence, narcotics are already taken regularly, and tolerance for them increases.

Stage II (the developed stage) is characterized by a further rise of the tolerance up to its maximum, the character of the narcotic inebriation changes, and physical dependence appears.

Stage III (the terminal stage): the tolerance falls, positive feelings after taking a narcotic absolutely disappear, severe somatoneurological disorders develop.

Classification of narcomaniae

I. Opiumism
II. Cannabism
III. Barbiturism
IV. Narcomania caused by abuse of psychostimulants:
1. Amphetamine narcomania;
2. Abuse of hand-made drugs, preparations of ephedrine and ephedrine-containing mixtures;
3. Cocainism
V. Narcomania caused by abuse of hallucinogens:
1. Mescaline and psilocybin;
2. LSD;
3. Phencyclidine
VI. Polynarcomaniae, complicated narcomaniae.

Opiumism

Opiumism develops in cases of abuse of opiates – narcotic analgetics obtained from the opium poppy (Papaver somniferum), as well as by a synthetic way. Opiates include: a) natural preparations (raw opium, milk of the opium poppy, poppy straw, pure opium alkaloids: morphine, codeine); b) synthetic preparations (promedol, methadone, lidol); c) semisynthetic preparations (heroin). Narcotic "inebriation" develops even after taking small doses of opiates. The patient feels some specific bliss and joy, his thoughts flow rapidly, all the problems go to the background.

Overdosage of opiates is a state which is dangerous for life and accompanied by slow respiration, hypothermia, hypotension, bradycardia, pupillary constriction. The death usually results from respiratory arrest. A triad of the signs (a coma, the pupils in the form of a pinhead, difficult respiration) testifies to an overdosage of opiates and requires urgent medical aid (an injection of opioid antagonists, particularly naloxone or nalorphine).

Stage I of the narcotic disease is characterized by appearance of mental dependence, a regular taking of a narcotic, an increasing tolerance. The latter rises 2–6 weeks after the beginning of a systematic use of a narcotic. In case of an absence of the narcotic, the patients' spirits become lower and their mental state worsens.

Stage II of the disease develops 3–8 weeks after the beginning of a systematic use of a narcotic. Tolerance sharply increases and achieves high values. Thus, the patient may take doses of opiates exceeding therapeutic ones 200–300 times. Stage II is characterized by the abstinence syndrome which develops within a few hours after the last use of a narcotic and reaches to its maximum after 1.5–3 days, its most acute symptoms persist up to 10 days, and residual ones even longer. Six-eight hours after the last use of a narcotic, the patient develops short temper, anxiety, dysphoria, general malaise, weakness, yawning, lacrimation, rhinitis, sneezing, itching in the nose and nasopharynx, a sensation that the nose is stuffed, the intestinal peristalsis is increased. There is mydriasis, tachycardia, tremor, anorexia, an aversion to a tobacco smoke, a sleep disturbance. Later the patient feels chill, hyperhidrosis, unpleasant painful sensations in the muscles, the body is covered with "gooseflesh", severe pains in the muscles of the arms, legs, back, which are extremely excruciating for the patient.

At stage III, the euphoric effect of a narcotic disappears and it is injected only to maintain the capacity for work and the mood. Tolerance for a narcotic decreases. In the state of abstinence the patients feel muscular discomfort, disturbances in the cardiovascular.

A systematic use of opiates results in severe somatic and mental disorders. The patients look older of their age, their skin is pale, dry and icteric, the face is wrinkled, the hair and nails are thin and fragile, the patients are exhausted, they early grow bald and often loose all the teeth. The veins are thickened, resemble plaits, have numerous scars, sometimes they are absolutely obliterated; phlebititides are very common. Pulmonary emphysema develops; pneumoniae, hepatitides, glomerulonephritides and polyneurititides frequently occur. Mental disorders at the initial stages manifest themselves by asthenic symptoms, in the late stage of the illness the patients become disabled because of severe asthenia and anergy.

Many patients (oftener those who use heroin) form signs of an intellectual-mnestic defect, lack of criticism, torpidity of thinking, diminished attention, superficial statements, memory disturbances. Their interests are concentrated only on the ways of getting a narcotic, they are untruthful and shameless, do not worry about loss of their job, family and their own health.

The prognosis of opiumism is unfavourable, the recovery is very seldom and remission may be achieved only in 1/5 of the cases.

Cannabism

Abuse of hemp preparations is the most wide-spread form of narcomania in the world; they are used by more than 200 million people of the Earth. The narcotic effect is produced by psychoactive substances which the hemp (Cannabis) contains – cannabinoids; the most active of them is trans-Δ^9-tetrahydrocannabinol (THC), the Indian hemp (Cannabis indica) being especially rich in it.

Cannabinoids are used with food and drinks, but more often inhaled when smoking. Marihuana is mixed with tobacco and cigarettes are rolled; they are longer than common ones and burnt out slantwise (in the narcomaniacs' slang, they are called "joints", "rockets"). The use of marihuana often begins as early in the older forms of school.

According to literature data, the majority of the people who tried and use hemp preparations live in the USA, Australia, Canada, Norway. In the countries of the Commonwealth of Independent States about 2/3 of narcomaniacs join narcotics through the hemp.

The first 5–10 minutes after a use of a narcotic may develop some fear, anxiety followed by euphoria with an ardent desire to run, dance, jump, a feeling of warmth in the whole body, some particular lightness, as if the feeling of one's own weight were lost ("weightlessness"). An inadequate gaiety is accompanied by loud laugh in connection with an insignificant thing.

If a narcotic is used by a group, then usually the laugh "catches" the whole company because of increased suggestibility. By the same mechanism, the group may feel fear, anxiety, horror. Many people develop psychosensory disorders with phenomena of derealization and depersonalization It is not in rare cases that macropsiae appear, the perception of the shape of objects is distorted. The patients' orientation in time and space is affected: at one moment the course of time accelerates, at another it decelerates; a distance between objects as well as between those people who have used a narcotic and others seems tremendous; it seems to them that the hand will never reach to a glass, steps of a staircase "stretch up to the sky". Self-consciousness is disturbed, there is some split personality, when on the one hand the one's own "self" is perceived, but nearby there is another person who controls the acts, made by the first one, and mocks at him. Drives are sharply disinhibited, appetite increases, hypersexuality and aggressiveness appear.

The state of intoxication is accompanied by autonomic disturbances: hyperaemia, a pale nasolabial triangle, tachycardia, dryness, dilatation of the pupils. The intoxication lasts from 30 minutes to 2–4 hours after marihuana and up to 5–12 hours after hashish.

Stage I of narcomania is characterized by appearance of mental dependence; the narcotic is now smoked by the patient alone 2–3 times a day, he is preoccupied only by thoughts how to get next dose. Within breaks in the use of the narcotic the patient suffers from listlessness, sleepiness, low spirits, headache, unpleasant sensations in the heart region, short temper.

Stage II of narcomania develops after 2–3 years of a regular smoking of hashish. The abstinence syndrome develops: malaise, tiredness, jadedness, loss of appetite, tremor, sweatiness, palpitation, low spirits with short temper, irateness, maliciousness, anxiety, different cenesthopathies. The maximum development of abstinence is achieved by the 3^{rd}-5^{th} day, its duration averages up to 2 weeks.

During *stage III of narcomania*, which develops in chronic use of hashish, psychopathisation of the personality begins (listless, passive, inert, sullen, reserved, memory and attention are reduced disrupted behavior). In 15 % of cases there are chronic schizophrenia-like psychoses.

Narcomaniae caused by soporifics

Abuse of soporifics, included into the list of narcotics, belongs to narcomaniae, while abuse of other soporifics is regarded as toxicomaniae. Narcotics are derivatives of barbituric acid: Barbital (Veronal), Phenobarbital, Nembutal, as well as Noxyron from soporifics of the nonbarbituric line. Abuse of soporifics may be in those patients who take them for sleep disturbances or to feel euphoria.

The patients abusing soporifics with the purpose of euphoria, usually inject them intravenously in the doses exceeding the therapeutic ones 2–3 times. Gradually the euphoric effect in the patients of this group decreases and they develop tolerance.

Narcomaniae caused by barbiturates

Acute intoxication with barbiturates resembles alcoholic one: inhibition, lack of coordination of movements, torpidity of thinking, hypomnesia, slow speech, disturbance of criticism, difficulties in concentration of attention, emotional lability, disinhibition of sexual and aggressive impulses, sharpened personality peculiarities, nystagmus, diplopia, ataxia, hypotonia, uneven reflexes. The patients' blood reveals barbiturates.

A chronic intoxication with barbiturates rather rapidly, within 4–5 years, results in rough disorders of the personality, formation of the psychopathy-like organic defect. The patients' appearance is specific: their face is grey-greenish, with some thin greasy coating, paste-like and with deep mimic folds. The pupils are dilated, their reaction to light is reduced. The movements are not coordinated. The blood pressure is abnormal (higher in the state of abstinence and lower in intoxication). The tongue is covered with some thick dingy brown coat. Commonly, the following neurological disturbances are observed: small-swing tremor of the fingers of the stretched arms, unsteadiness on the legs in Romberg's posture, horizontal nystagmus, absence of convergence. Some patients develop polyneuritides, anaemia, agranulocytosis.

Narcomaniae caused by abuse of psychostimulants

Amphetamines, preparations of ephedrine and ephedrine-containing mixtures, cocaine and others psychostimulants produce an exciting effect on the CNS .

Amphetamines (amphetamine sulphate (Phenamine), dextroamphetamine (Dexedrine), methamphetamine (Methedrine), methylphenidate (Ritalin)) are taken orally and injected intravenously.

Acute intoxication: high spirits, physical cheerfulness, accelerated thinking, a higher urge to act and communicate, garrulity, hypomaniac syndrome.

A chronic use of amphetamines gives rise to dystrophia, avitaminosis, ulceration of skin integuments, sleep disturbance, rough autonomovascular disorders. Amphetamine narcomaniacs develop degradation of the personality.

In recent time young people, often juveniles, use for their entertainment such a drug as Ecstazy, which is 3,4-methylenedioxymethamphetamine (MDMA). As a rule, Ecstazy is used in the form of pills at discotheques and dance parties in order to raise activity. Taking a pill of Ecstazy gives rise to a feeling of general fraternity, intimacy, love for people, some particular bliss, delight for 20–30 minutes. Later, a stimulatory effect develops: a desire to move and dance, appearance of illusions, sexual excitement, a rapid flow of thoughts, "the brain is as if in some mist". The postintoxication period is characterized by listlessness, weakness, sleepiness, depression, difficult intellectual activity, pains in muscles. A regular use of Ecstasy results in a higher tolerance and a need to take the drug every day. The picture of inebriation changes, euphoria turns into some fear, shortness of temper; visual hallucinations and illusions, panic attacks, depressive and paranoid states have been also described. Taking of Ecstazy causes severe disorders in the liver and heart, hyperthermia with a subsequent heat stroke and lethal outcome.

***Narcomaniae caused by hand-made preparations of ephedrine and ephedrine-containing mixtures (efedron and pervitin narcomaniae*)** are rather common. *Ephedrine*, an alkaloid contained in the ephedra grass (*Ephedra*), produces an exciting effect on the CNS. By a hand-made method and using potassium permanganate with acetic acid, narcomaniacs manufacture potent home-made psychostimulants Efedron and Pervitin from ephedrine and ephedrine-containing mixtures. Abuse of these drug preparations gives rise to the development of manganic encephalopathy.

Taking of Efedron develops euphoria with particular psychosensory disorders, the patients feel an unusual lightness in the body, a sensation of stirring hair on the head, a feeling of weightlessness. The surrounding objects seem richly and brightly coloured. Synaesthesiae develop: together with sounds, some iridescent spots appear in the eyes. The patients develop a feeling of their own kindness, love for people, an unusual clearness of thoughts, their mood becomes higher, they are garrulous not to

the point. Their appetite and sleep disappear, urination is suppressed, tachycardia and dryness in the mouth develop. This state of intoxication lasts up to 6–8 hours.

In Pervitine inebriation, depersonalization disturbances are expressed to a larger extent. Taking of large doses of hand-made psychostimulants, 1/3 narcomaniacs in the state of intoxication develop intoxication psychoses in the form of acute or rudimentary paranoid with delusions of persecution and special meaning, verbal and visual hallucinations. The psychoses usually appear after many days of narcotization, when doses of a drug reach to maximally tolerable values. In these cases, instead of euphoria, a usual injection of a drug gives rise to fear, anxiety, stress, a feeling of some oncoming danger. The patients develop auditory hallucinosis or the hallucinatory-paranoid syndrome with delusions of persecution, reference, affection, sometimes grandeur, accompanied by an expressed motor excitement.

An episodic abuse of Efedron lasts from 1–2 weeks to 6 months, usually 2–4 months. Mental dependence forms during 3–4 weeks. In Pervitin abuse, formation of mental dependence is much more rapid, within 3–4 days, and sometimes the stage of an episodic use of Pervitin is absent and even the first injection is followed by its regular use. Physical dependence forms after 6–12 weeks of a regular narcotization on Efedron and after 2–3 weeks on Pervitin. The abstinence syndrome develops 6–12 hours after Efedron intoxication and 18–20 hours after Pervitin one. The abstinence is characterized by three groups of disorders: sleep disturbances, affective disorders and asthenia.

An abuse of home-made psychostimulants causes rapid development of psychopathization of the personality, an expressed emotional roughness, reduction of the capacity for work, moral-ethic decrease, memory and intellect.

For many centuries there is a habit in a number of countries of East Africa and Arabian Peninsula to chew ***kat leaves*** (leaves of the kat shrub, *Catha edulis*) which contains several active substances, including amphetamine-like cation and less active katine, which is identical to appetite suppressing D-norpseudoephedrine, a component of many slimming remedies. Chewing kat leaves for many years causes mental dependence, a drive for kat may be overvalued-dominating (more frequently) and obsession-like. Abstinence develops in elderly patients who have been using kat for 15–20 years and is characterized by a slight expression of the following signs: myasthenia, cramps in the sural muscles, sleep disturbances, paresthesiae, decreased peristalsis, reduction of appetite and sexual drive.

Chronic kat intoxication goes through 3 stages.

The first stage: mental dependence, no abstinence, loss of the quantitative and situational control and a stable tolerance.

T*he second stage:* the period of euphoria decreases, the tolerance has stabilization, abstinence develops, negative streaks of the character sharpen, signs of social degradation develop.

T*he third stage*: presence the physical dependence, atypical forms of the inebriation, eliminate asthenia and anxiety, psychopathisation and social degradation, paranoid psychoses. The daily dose is reduced.

Cocainism Cocainism has been known for a long period of time. Cocaine was extracted from leaves of the coca shrub (*Erythroxylum coca*) in 1860s and used for local anaesthesia.

Acute cocaine intoxication manifests itself by high spirits, a feeling of a fresh surge of energy, higher cheerfulness, a tendency towards overestimation of one's own significance and abilities, disinhibition, garrulity, hyperactivity, maniac syndrome. Overdosage of cocaine develops psychotic intoxication with fear, anxiety, confusion, as well as visual, auditory and tactile hallucinations, cocaine delirium, cocaine oneiroid, cocaine paranoid (persecution or jealousy).

Cocaine causes physical dependence which forms within 4 years in adults and after 1.5 years of abuse in juveniles. Cocainism results in a change in the personality, decrease of moral-ethic emotions, a sharply narrowed sphere of interests, defective memory and reduced intellect. Often the patients leave their job, do not care for their relatives, live a parasitic life. They are sharply exhausted because of a loss of appetite, their face is greyish and mucosae are dry. The intranasal use of cocaine may cause necrosis and perforation of the nasal septum, intravenous injections often give rise to abscesses. The sleep is roughly disturbed, it is accompanied by nightmares.

Narcomaniae caused by hallucinogens

This type of abuse is good known for many times. This group (the peyote cactus (*Lophophora williamsii*), mescaline, psilocybe (*Psilocybe mexicana*), LSD, dipropyltryptamine (DPT), phencyclidine, ketamine).

Hallucinogens cause disinhibition of the activity of the occipital areas of the brain and limbic structures by influencing the metabolism of catecholamines, dopamine, acetylcholine, serotonin and GABA. All hallucinogens produce an expressed sympathomimetic effect manifesting itself through tremor, tachycardia, hypertension, sweating, mydriasis, indistinct vision.

Abuse of LSD (lysergic acid diethylamine). LSD can be in the form of powder, solution, capsules or pills; the substance has no taste, smell or colour; it can be dissolved on a lump of sugar or a piece of blotting paper. Oftener it is taken orally, in isolated cases it is injected subcutaneously or intravenously, sometimes it is smoked in a mixture with tobacco.

LSD effect begins even after taking 20–35 mg, but usually the taken dose is much higher, 50–300 mg. LSD intoxication develops one hour after its taking and lasts up to 8–12 hours. Most frequently, visual hallucinations appear; at first in the form of vague contours, geometrical figures, bright flashes of light. Later true visual hallucinations develop, rather often they are frightening. At the same time, auditory and tactile hallucinations are observed. The patients' mood changes from euphoria, ecstasy to anxiety, panic. Suggestibility and sensitivity to stimulants become higher, colours acquire an unusual saturation, perception of music and taste sharply become more sensitive. Typical are synaesthesiae, when sounds are perceived as coloured and colours sound. Perception of the time is affected, as if it became prolonged. Depersonalization, derealization and a disorder of the body scheme develop. LSD intoxication is accompanied by a sensation of the work of one's internal organs whose signals usually do not reach to consciousness. In the memory there is reanimation of events from the remote past, often early childhood. The depersonalization acquires peculiar forms: the patients have the feeling that their own "self" separates from the body, they also feel that they are going mad and will never be healthy again. Many people taking LSD develop a feeling of profound understanding of religious and philosophic ideas which was difficult for them before. After that they have a false idea about a higher creative potential of their own personality.

The hallucinations and other mental disorders affect the patients' behaviour. If criticism is preserved, they only passively contemplate everything occurring with them. If the intoxication is more profound, then criticism towards morbid feelings is absolutely absent and the patients may commit aggressive or autoaggressive acts. At the height of an expressed intoxication, psychotic states develop with the hallucinatory-paranoid or maniac-paranoid syndromes whose duration is insignificant (a few days), but a delirious interpretation of the hallucinations is preserved even after their disappearance. In the postintoxication state there is development of severe depression with agitation and suicidal tendencies, their duration being from 1 to 7 days.

The most typical complication in people taking LSD is a recurrence of mental disorders some time after using the drug. This is a so-called "bad excursion", "bad trip", which resembles an acute panic reaction to cannabis accompanied by psychotic symptoms. This state develops in 1/4 of the people using LSD and lasts 8–12 hours, sometimes even longer.

Another typical complication of the effect of hallucinogens is a spontaneous transitory drug-induced feeling which appears when the person did not take the drug before. In some cases the hallucinatory-paranoid or depressive (with hallucinations) syndromes develop, in others isolated fragments are reproduced in the form of elementary visual hallucinations or illusions. The American classification terms these disturbances as a "flash back", their duration is 24–48 hours, sometimes longer. Some LSD consumers develop mental dependence in the form of a strong drive for a repeated use of the drug. Tolerance develops rapidly, but disappears rapidly too (within 2–3 days). Physical dependence in case of LSD use is absent. Also the literature does not have any clear data about significant personality changes or protracted psychoses.

Abuse of phencyclidine. Beginning from 1970s, phencyclidine was used as a "street drug", which in the narcomaniacs' slang is called "angel dust", "angel hair", " dust of angels", "crystal", "peace", "supergrass", "(super) cools", "superjoint", "supergrain", "rocket fuel". It is taken orally, intravenously, when smoking and in combination with other drugs. Most frequently it is injected into a marihuana cigarette or taken orally. The drug is easily absorbed by the blood and produces a sympathomimetic, cholinergic effect, it evokes a response of the serotonin system.

Psychotic manifestations develop even in a moderate intoxication. As a rule, these are cloudiness of consciousness with hallucinations, delusions or a maniac state with hyperactivity, accelerated thinking, tachylalia, far-reaching plans. Sometimes, during an acute psychotic episode the behaviour is seriously affected: the patients would tear clothes on themselves, masturbate, laugh or cry, they are untidy. These periods are usually forgotten. An acute psychotic episode lasts from 24 hours to 1 month. It is possible to observe a recurrence of the psychosis after discontinuation in using the drug, a so-called "flash back".

Tolerance for phencyclidine increases slowly, its regular use may develop mental dependence. The abstinence syndrome is never observed. The postintoxication period is characterized by general malaise, weakness, sleepiness, depression, paraesthesiae, tremor, cramps in the facial muscles. A chronic use of the drug develops the organic psychosyndrome with a sharp hypomnesia, disturbance of attention, inability to control one's own actions, disruption of the cognitive function. In case of a prolonged abstinence from the use of the drug the patients' mental faculties improve. Phencyclidine narcomania is characterized by frequent relapses of the illness.

Abuse of ketamine. The latter is used with medical purposes in anaesthesiology for transitory narcosis. Ketamine causes a rapid and short-term effect resembling that of phencyclidine. It is injected intramuscularly and intravenously in the form of 5 % solution. The effect of the drug begins 15 minutes following its injection and lasts up to 3 hours.

After taking the drug, the patient's mood becomes higher, he develops a feeling of an unusual bliss, some lightness in the body, flight, infinity of the surrounding space, phenomena of derealization and depersonalization, a disorder in the body scheme. Visual hallucinations are unusually vivid, sometimes of a frightening type, but they arouse some interest in the patients, rather than fear. At the height of the intoxication there is disturbance of consciousness with disorientation, a feeling that the patients are in some infinite space, they communicate with the God or devil, may hear some extraterrestrial music.

Use of ketamine rapidly develops physical dependence, sometimes as early as after a few injections. Tolerance rapidly increases, single doses and their daily number become larger, in some cases the daily dose reaches to 1,000–1,500 mg of ketamine. No abstinence syndrome in ketamine abuse has been described, but an expressed pathological drive for the drug, aggravated postintoxication symptoms and frequent relapses are evidence of physical dependence.

Polynarcomaniae and complicated narcomaniae

Polynarcomaniae are the diseases when several narcotic substances are used simultaneously or in a certain sequence, and the patient has formed dependence upon each of them.

Complicated narcomania is a disease when the narcomaniac has dependence upon narcotics and substances which are not regarded as narcotic. The most common is narcomania complicated by alcoholism.

Polynarcomaniae and complicated mononarcomaniae often develop at the stage of choice of a preferred narcotic, as well as in the initial state when narcomaniacs strive for getting a desirable effect with help of additional psychoactive drugs. But they also can develop at other stages of narcomania formation.

The commonest are opium-barbiturate, codeine-glutethimide and opium-efedron polynarcomaniae. Of complicated narcomaniae, more frequent are abuses of opiates and diphenylhydramine hydrochloride, benzhexol hydrochloride, tranquillizers, alcohol, a simultaneous abuse of sedatives- soporifics and alcohol. Most narcomaniacs begin their abuse with hashish, then other drugs are added.

The clinical picture of the abstinence syndrome in polynarcomaniae and complicated narcomaniae includes the signs characteristic of each of the drugs used. But if among the preparations there are opiates then the abstinence is mostly characterized by the action of the drugs of this group.

MENTAL AND BEHAVIORAL DISORDERS DUE TO SUBSTANCES THAT ARE NOT INCLUDED IN THE STATE LIST OF NARCOTICS ABUSE.

Toxicomaniae are the diseases, which are caused by abuse of the substances not included in the state list of narcotics and manifesting themselves by mental (and sometimes physical) dependence upon them (do not have any juridical criterion).

Classification of toxicomaniae

1) Toxicomaniae caused by abuse of tranquillizers and soporifics
2) Toxicomaniae caused by abuse of psychostimulants
3) Toxicomaniae caused by abuse of hallucinogens
4) Abuse of atropine-containing drugs
5) Abuse of antihistamine preparations
6) Abuse of benzhexol hydrochloride
7) Toxicomaniae caused by inhalation of volatile organic solvents
8) Nicotinism
9) Polytoxicomaniae

Toxicomaniae caused by abuse of tranqillizers

The most toxicogenic are benzodiazepine tranquillizers, the most wide-spread group of the drugs in the world (diazepam, lorazepam, nitrazepam, clonazepam, chlordiazepoxide).

Benzodiazepine-induced intoxications with a feeling of rest develop, the mood improves, all the problems come to the foreground. There is development of obnubilation; sleep, or sopor in over dose cases.

A long-term abuse of tranquillizers results in the formation of an organic defect of the personality with an intellectual-mnestic decrease, listlessness, hard-heartedness, rudeness, selfishness, cruelty towards friends and relatives.

Nicotinism (tobacco dependence)

Nicotine possesses a high degree of narcogenity, proved at least by the following fact: 85 % of people, who have smoked their first cigarette, later become smokers. Not all the smokers develop dependence. Along with so-called ardent smoking there is moderate smoking and smoking for removal of mental stress. On the basis of numerous studies made by researchers of our and other countries it is possible to say about nicotine-induced mental and physical dependence. The phenomena of abstinence develop 1.5–2 hours after the last cigarette smoked.

If compared with nonsmokers of the same age, smokers having phenomena of dependence more frequently develop the asthenic syndrome, they easier get tired, often make mistakes fulfilling the tasks which require tension and attention.

By the literature data, they are characterized by impulsive behaviour, a lower level of education, anxiety, ill will towards other people. Smokers oftener develop insults and infarctions with resultant defect-organic mental disorders up to dementia. Their hearing is significantly diminished, the sense of taste is affected. Tobacco smoking causes severe disturbances in the internal organs.

General principles in treating narcomaniae and toxicomaniae

The treatment of narcomaniae and toxicomaniae is provided by several stages. *The first stage* in the majority of patients begins with a sharp absolute abolition of the drug. Excluded are the cases of abuse with barbiturates, sedatives-soporifics, combinations of other narcotic drugs with high doses of these preparations, as well as presence of a severe accompanying pathology. In such cases the drug is abolished stage by stage. The treatment includes control of the abstinence syndrome and disintoxication measures directed at correction of the somatoneurologic and mental disorders.

At *the second stage*, the treatment includes general health improving therapy up to the absolute restoration of the somatic functions, as well as correction of behavioural and mental disorders up to the normalization of the mental state.

The third stage consists in employing purposeful therapy for the dependence syndrome. The therapy should be pathogenetically substantiated with regard for the chemical structure and the mechanism of action of the narcotic, and clinical peculiarities of each patient (prevalence of physical or mental dependence, psychopathological arrangement of the pathological drive for the drugs, peculiarities in its dynamics [periodical, constant], pathocharacterological peculiarities of the patient).

The fourth stage: antirelapse supportive therapy with regard for the conditions of the appearance of previous relapses of the disease. External situations and endogenous factors, which cause exacerbation in the drive for drugs and result in relapses, are to be revealed.

Control questions

1.Simple and pathological alcoholic intoxication

2. Diagnostic criteria of alcoholism

3.Stage of alcoholism

4.Alcoholism in women

5.Treetment of alcoholism

Test

1. 37 y.o., meil, doctor. During the period of study in medical university often drink spirit drinks with friends, without big craving to alcohol. 5 years ago, he started take alcohol at the morning (in course of abstinence). In mental state: haven't criticism: I'm drink like all, maybe a little more. Increase emotionally in talk about vodka. Products cynic jokes, teasing. In somatic state: extending the boundaries of the heart on the left side, voiceless heart tones, stomach pain in the right upper quadrant, liver near the edge of the costal arch. What is the most informative examination for clarification of diagnosis?

A. Computer tomography of a brain
B. Blood analyzing of content of an alcohol
C. The analyzing of fragments of blood serum
D. An experimental-psychological examination
E. Clinical and psychopathological examination.

2. Patient P., 26 years. Powered car mechanic, for the past 2 years of frequent conflicts at work. Drink alcohol from 16 years old, take alcohol at the morning (in course of abstinence). Drink alcohol almost every day, "little by little". Twice a week drunk to severe degree of intoxication. Therapeutic tactics regarding this patient?

A. Treatment without patient's wish
B. Voluntary consultation and treatment by a psychiatrist
C. Direction to treatment-labor dispensaries
D. Direction to MCEC (in course of disability)
E. Psychological consultation.

3. The patient's face amimic, pupillary reaction to light is missing, the smell of alcohol and vomit out of his mouth. Atony of muscles, heart sounds weak, cyanosis of the extremities, bradypnoe, involuntary urination and defecation. What is the most likely diagnosis?

A. Alcohol intoxication
B. Hypoglycemic coma
C. Acute poisoning
D. Traumatic coma
E. Ischemic stroke

4. Patient 22 years. Taken to the hospital on duty in the street. Lying in the snow, not moving, it is accessed something vaguely muttered. Mouth odor of alcohol, face cyanotic, amimic. When the patient got up, I tried to go but could not due to severe ataxia. Pulse weak filling, arrhythmic. Determine how to stop violations described:

A. Intravenous injection of 40 % glucose solution with ascorbinic and nicotinic acid.
B. Intravenous drip gemodeza in with Pananginum, vit. B_6 and B_1.
C. Inhalation of a mixture of oxygen and $C0_2$
D. Forced diuresis
E. All of the above

5. Man and 37-years. While driving on his own car on icy road hit a man, causing him minor injuries. Traffic police was brought to the office for examination of drug intoxication. Objectively: pale, his hands trembling, tachycardia, dilated pupils, suffers from diabetes. It denies the fact of the use of alcohol. The blood alcohol content of 15 mmol / l. Determine the status of the surveyed:

A. Sober
B. Mild simple alcohol intoxication
C. Moderate simple alcohol intoxication
D. Severe simple alcohol intoxication
E. Pathological alcohol intoxication

Tasks

1. 39 y.o. man with a history of traumatic brain injury. During the feast drank 50 ml of strong alcoholic drink, behave adequately. Suddenly jumped up, he left the room, without explaining anything to anyone. In the speech addressed to him, he did not react. He returned a few minutes later with a knife in his hand, tried to attack around the table, shouting individual sounds. After 5 minutes, it came to nothing of the incident could not remember.

Rate the mental state of man. Diagnose. Determine the order a forensic medical examination in the case of offenses in this state.

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2. Young man, 19 years old, asked for help from a psychiatrist. Over the past year periodically (1–2 times a month) used “marks”. In recent years, he began to notice the alarm without drug use. There was a feeling that the world has changed and that the irreversible changes in himself. He became afraid to go out, he believes that being watched by unknown persons. He complains of memory loss and loss of control over his actions.

What condition has occurred in a young person? List the necessary additional studies and principles of treatment of this condition.

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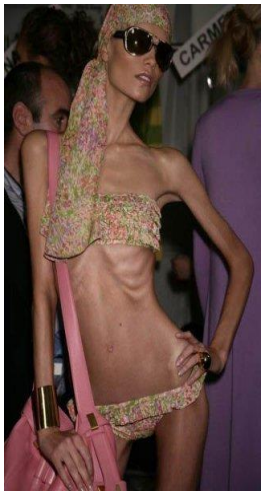
Class № 6

BEHAVIORAL DISORDERS ASSOCIATED WITH IMPAIRED FOOD INTAKE AND SLEEP. BEHAVIORAL SYNDROMES ASSOCIATED WITH SEXUAL DYSFUNCTION. MENTAL RETARDATION, CLINICAL MANIFESTATIONS. THERAPEUTIC AND CORRECTIVE ACTIONS

BEHAVIORAL DISORDERS ASSOCIATED WITH IMPAIRED FOOD INTAKE.

Anorexia nervosa is a disease often manifests in childhood or adolescence and is a deliberate restriction in food intake, or even a complete rejection of food in order to correct an imaginary or drastically overestimate overweight. The patient has been distorted perception of their physical form. Relentless pursuit to remedy this "deficiency" lead to severe secondary somato-endocrine shifts, significant weight loss is often up to cachexia.

Start of intensive study of the disease associated with the work W. Gull (1868), Ch. Lasegue (1873), which are almost simultaneously and independently from each other have published articles on anorexia nervosa. W. Gull coined the term "anorexia nervosa» (anorexia nervosa). In Russia, one of the first publications on this subject belongs to AA Kiselev. In 1894, he described the genesis of hysterical anorexia nervosa, 11-year-old girl. The modern concept of the disorder began to assert itself through the work of Hilde Bruch, Arthur Crisp and Gerald Russell. Of particular interest in anorexia nervosa emerged at that time was due to its increasing incidence. According to J. Payne (1969), '60s were a real boom for the patients of this kind. " H. Bruch (1965), believes that anorexia nervosa belongs to the range of diseases, "specific to a particular century, a certain cultural level." Noting that each epoch its demands to the human nervous system, W. Baeyer (1965) anorexia nervosa refers to diseases of our time, "disease of the century."



Anorexia nervosa occurs at a frequency of 0.37 % to 100 thousand. Population and is most common in northern European countries, where the incidence of new cases of it is 4 100 thousand. Population. The total prevalence of anorexia nervosa was 1.2 % among women and 0.29 % among men, due to changes in the criteria of feminine beauty with the idealization of a fragile constitution. Anorexia nervosa often noted in the age 14–18 years, but perhaps its origin in people 20–28 years.

The etiology and pathogenesis of anorexia nervosa

Anorexia nervosa should be considered as a heterogeneous disorder with a complex multifactorial etiology, is the interaction of heredity and environment, especially social factors. At present, it is assumed that anorexia nervosa is the result of a combination of individual predisposition and social factors that induce to observe the diet.

Genetic factors. Relatives of the first line of kinship are more likely to develop anorexia nervosa. In monozygotic twins marked by a large concordance incidence than in dizygotic twins. Linkage analysis of genes within the genome is not found for the loci diagnostic broad category of anorexia nervosa. Genetic vulnerability exists probably in predisposition to a certain type of the constitution, which is subject to factors that mediate manifestations of cleaning behavior (self-induced vomiting), the restrictive supply patterns. Exhibit a genetic predisposition and vulnerability may be in adverse conditions such as improper diet or emotional stress.

Biological factors. These include overweight in childhood and early menarche. Attaches importance to dysfunction regulating feeding behavior of neurotransmitters, such as serotonin, dopamine, norepinephrine, detectable in patients with eating disorders.

Family factors. The families of patients with anorexia nervosa often describe special "intra-climate" – the dominance of tyrannical mother in child rearing when a subordinate position and the non-participation of his father in the upbringing of children, which may be a contributing factor to the development of eating disorders and impeding recovery. Some importance in the origin of anorexia nervosa given to factors such as negative attitudes to food in the family, over feeding child in early childhood.

Personal factors. By the psychological risk factors include obsessive perfectionist-type personality, low self-esteem, a sense of worthlessness, self-doubt. Quite often you can observe in the nature of the patients presence hysteroid with egocentrism, a high level of claims, as well as psychasthenic features – uncertainty, anxiety, shyness, isolation, increased demands on themselves and others, uncompromising, lack of flexibility in dealing with others, an excessive sense of duty, increased integrity, pointed vanity, the desire for high performance in school ("a student's disease"), lack of desire to please teenagers of the opposite sex, neglect of girls clothes and ornaments.

Socio-cultural factors. They are living in the industrialized countries, the emphasis on thinness as the main sign of beauty. There are indications that certain activities may contribute to the development of eating disorders, including anorexia nervosa. Most predisposition to anorexia, marked by students of ballet schools, gymnasts, models.

Clinical manifestations of anorexia nervosa

Anorexia nervosa eating disorder characterized by deliberate weight loss, induced and / or supported by the patient, for the purpose of weight loss or prevention of weight gain. When anorexia is observed pathological desire weight loss, accompanied by a strong fear of obesity. The patient has been distorted perception of their physical form and present fear of weight gain, even if this is not really there special ways of dealing with food. This leads to severe secondary somato-endocrine shifts, significant weight loss is often up to the onset of cachexia and amenorrhea as one of the main clinical manifestations developing in chronic food insufficiency. This loss of appetite in patients is rare, and only in advanced cases.

Restriction food that good dissimulated earlier in conscious leads to the fact that under the supervision of psychiatric patients appear only after 3–4 years or more from the beginning of intensive weight loss, usually in a state of severe cachexia with persistent amenorrhea. The severity of secondary somato-endocrine violations were rarely require hospital treatment for vital indications. During formed syndrome of anorexia nervosa underweight in severe cachexia is 30–50% or more of body weight to the disease.

Anorexia separated during the following stages:

Stage 1 – dismorfomania.

Stage 2 – anorectic.

Stage 3 – cachectic.

Stage 4 – reduction of anorexia nervosa.

Clinic of the first stage is usually exhausted by very special option Dismorphomania syndrome (in the classic version of this syndrome include delusional or overvalued ideas of discontent own appearance, the idea of relationships, depression and lack of desire for an imaginary correction) (MV Korkin, 1967). A feature of this syndrome in anorexia nervosa is relatively lower expression of ideas and the relationship of depression with severe intensity activities aimed at "correcting physical disability." Ideas include physical disability conviction excessive fullness, teens may not like any of their "correct figure" as a whole or parts of the body, "round cheeks", "fat belly", "rounded hips." The emergence of discontent own appearance coincides, as a rule, the real change in body shape, typical of adolescence. Thoughts about excessive fullness can be either overvalued or delusional.

Typical of this syndrome is the idea of relationships in anorexia nervosa is very rudimentary. The decisive in the formation of the syndrome is often a discrepancy between the patient, in his opinion, his own "ideal" – a literary hero or a person's inner circle with the desire to imitate him in everything, and above all, be similar to his appearance and figure. The opinion of others on the exterior of

the patient is much less important to him. However, sensitivity teens cause that trigger the desire to "correct" physical disability become careless remarks of teachers, parents and peers.

The third typical classical syndrome Dismorphomania component – affective disorders – with this disease also has the features. Depressive disorders are generally less pronounced and more remote stages are closely related with the degree of effectiveness of the exterior of the correction carried out by patients. Among the features of anorexia nervosa Dismorphomania should include the fact that the possibility of correcting the alleged or actual physical shortage lies in the hands of the patient, and it is always one way or another it sells.

The first phase of anorexia nervosa lasts from 2 to 4 years and replaced by a second step in which the syndrome of anorexia nervosa becomes clinical perfection.

The second phase begins with an active commitment to the correction of the exterior and conditionally terminates weight loss of 20–50 % of the initial weight, the development of secondary somato-endocrine shifts oligo- amenorrhea or amenorrhea. weight loss methods can be very varied and carefully hidden at the beginning of the correction of excessive fullness. Initially, most physical activity, active sports patients combined with limited amounts of food. In the future, a way to lose weight varies depending on the nature and severity of "defect appearance", as well as premorbid personality traits, but it takes a leading position in the food restriction. By reducing the amount of food, patients initially exclude a number of foods rich in carbohydrates or proteins, and then begin to comply with the most severe diet and eat mostly dairy-vegetarian food. At the same time, patients with a strict diet to exhaustion engaged specially designed exercise – doing all standing, a lot of walking, reduces sleep, tightening the waist with belts or cords so that the food is "slowly absorbed."

Hunger in patients with anorexia nervosa expressed enough that substantially prevents the proper denial of food. Most patients hide their behaviors aimed at weight loss. Patients with anorexia usually refuse to eat with your family or in a public place. This food is their passion: they collect recipes and prepare delicious food for others. A characteristic feature of these patients is often a desire to “overfeed” of relatives, especially younger brothers and sisters. During the meal, they are trying to hide their portions to poke or swipe the pockets. When they point to their strange behavior, they often deny that this is strange, or just do not want to discuss it. All day, patients are hungry, constantly thinking about food, imagining all the nuances of the upcoming meal, the thought of food becoming intrusive. Having bought a lot of food, and sometimes stealing them, the patients returned home, lay the table, it is often beautifully served, and start eating the most delicious food to enjoy. However, they cannot stop and eat all the food available in the house. Attacks of bulimia are often observed in the clinical picture of anorexia nervosa. Bulimia is an irresistible hunger, almost no satiety, while patients can absorb very large amounts of food, often even not enough edible.

Overpowering fear of acquisition of overweight and completeness is characteristic of all patients with this disease. Patients are looking for more and more ways to lose weight. Among them are laxatives, often in very large doses, less use of enemas. Some people chew and then spit out the food. Another very common way to lose weight with the severity of hunger is artificially induce vomiting. Choosing this method often is conscious character, although sometimes patients come to him by chance could not resist the desire to eat, they eat a lot of food at once, and then because of the fullness

cannot keep her. The resulting vomiting and lead patients to believe that you can eat in sufficient quantity and quickly released from the food intake has not happened yet with the help of artificial vomiting.

Initially, gag act is accompanied by characteristic autonomic manifestations and delivers patient discomfort. In the future, with frequent vomiting, this procedure is simplified: patient enough to make expectorant movement or just tilt the trunk, click on the epigastric region and all eaten food is thrown out without painful autonomic manifestations. Some people have resorted to repeated gastric lavage after the first vomiting, drinking 2–3 liters of water.

Other passive methods for weight loss should also include the use of a number of drugs that reduce appetite and psychostimulants, in particular sydnocarb. In order to lose weight many patients start to smoke, drink large quantities of black coffee, use diuretics.

This feeding behavior results in weight loss and is accompanied by a gradual increase in the secondary somato-endocrine changes. On average, 1–2 years from the beginning of the "correction" alleged excessive fullness comes amenorrhea.

Clinic of mental disorders at this stage of the disease, in addition to the active "correction" of appearance, includes the fear to get better, which leads to further weight loss patients. Each piece is eaten by patients with anxiety. There affective instability, and the mood is largely dependent on how successful is the "correction" appearance; any, even minor, weight gain is accompanied by a sharp decrease in mood. Sophisticated family relations due to wrong eating behavior of patients are psychotraumatic factor, also causes pathological reaction to the situation. Thus, in the formation of affective disorders at this stage of the disease leading role belongs psychogenic factors.

An important place in the clinical picture of the disease take hypochondriacal disorder. Secondary gastro-enterocolite, omission of virtually all internal organs and especially gastro-enteroptosis, developing as a result of restrictions in food or improper feeding behavior, accompanied by pain in the stomach and along the intestine after a meal, persistent constipation. There is a lock on the patients' discomfort in the gastrointestinal tract. Typical for this phase of anorexia nervosa is due to the fear of food not only fear to get better, but also the possibility of occurrence of painful sensations in the epigastric region. By psychopathological disorders of this period are unique obsessive phenomenon. They are inextricably linked to dismorfomanike experiences and manifest themselves in the form of obsessive fear of food, wait for a strong sense of hunger, the need to induce vomiting and compulsive counting calories contained in the food eaten.

On stage anorectic anorexia sharpened the available to psychopathic traits disease. Grow explosively, selfishness, excessive demands, patients are becoming "tyrants" in their own families. Despite the significant weight loss, the severity of secondary somatoendokrinnyh shifts in patients with virtually no physical weakness, they were very moving, activity, performance. The long absence of patients with anorexia nervosa asthenic phenomena in the form of physical weakness, saving a large motor activity is an important diagnostic criterion, primarily to exclude primary somatic pathology.

The clinical picture of the disease in the anorectic stage often also includes autonomic dysfunction in the form of attacks of breathlessness, palpitations, dizziness, enhanced sweating Paroxysmal autonomic disorders often occur several hours after a meal Long purposeful restriction in food, as well as other forms of special eating lead, usually a significant weight loss (50% or more), and cachexia – the third stage of the disease.

At this stage, physical activity, typical of earlier stages of anorexia nervosa, is greatly reduced. The leading place in the clinical picture takes asthenic syndrome with prevalence adynamia and increased fatigability. During severe cachexia patients completely lose their critical attitude to his condition and still continue to stubbornly refuse to eat. Being extremely exhausted, they often say that they have overweight. In other words, there is a delusional attitude toward their appearance, based on what is a violation of the perception of their own body. Against the backdrop of severe fatigue may occasionally occur depersonalisation-derealisation phenomenon.

The clinical picture is dominated by somato-endocrine violations. After the occurrence of amenorrhea, weight loss is greatly accelerated. Patients completely absent subcutaneous fat, growing degenerative changes in the skin, muscles, developing myocardial and there are bradycardia, hypotension, acrocyanosis, drop in body temperature and skin elasticity, reduces blood sugar levels, there are signs of anemia. Patients quickly freeze, there is increased fragility of nails, hair fall out, broken teeth. Severe water and electrolyte shifts can lead to the development of painful muscle cramps, sometimes possible polyneuritis (nutritional polyneuritis). As a result, long-term eating disorders, as well as special eating heavier clinical picture of gastritis and enterocolitis. Patients not only fear, but also cannot eat normally because of the pathology of the gastrointestinal tract.

In cachectic stage of the clinical picture of poor, monotonous and almost a sister to all options syndrome anorexia nervosa any nosology. Phenomena of dysmorphomania on stage cachexia lose previous affective saturation, weight loss methods are limited to a carefully designed diet, and in some cases – taking laxatives and vomiting. The persistent refusal to eat on stage cachexia due to the lack of understanding of the severity of the patients of their condition and fear recover create great difficulties for the treatment of this serious condition, patients often categorically refuse to provide them with medical care.

To the doctor, patients usually fall when the body weight loss have become visible and there are such features as hypothermia (up to 35°C), edema, bradycardia, often lead to sudden cardiac arrest due to a lack of potassium, magnesium and total violation of electrolytes, hypotension and vellus hair growth (as in infants). Often it manifested postural hypotension; it typically is caused by hypovolemia and in some cases a decrease in cardiac output. The most common are physical complaints, especially of discomfort in the epigastric region, spasmodic stomach pain, chronic constipation, absence of lactose digestibility, nausea, functional dyspepsia, hair loss, dry skin, paleness, marbling of the skin, the appearance of fine hair on the face, on the back (lanugo), edema due to lack of protein, violation nail structure.

Among other effects should be allocated osteoporosis, fractures of extremities and spine. Long at provoking vomiting can cause tooth enamel erosion, caries or even abscesses; also possible pain in the mouth and throat. Riboflavin deficiency may be the cause of the cracks on the lips, especially in the corners of the mouth, and the iron and zinc deficiency causes glossitis and loss of taste sensation. Furthermore, there are a number of metabolic changes.

The progress of the reduction phase of anorexia nervosa is very important in the recovery process of patients. The clinical manifestations of this stage is dominated by asthenic symptoms, fear to get better, pathological fixation on the sensations from the gastrointestinal tract. If weight gain is updated Dismorphomania reappears desire to "correct" appearance, increases depressive symptoms. With the improvement of physical condition of physical weakness quickly disappears, patients become very mobile, eager to carry out complex exercise, may resort to high doses of laxatives, cause vomiting. Un-

til the restoration of menstruation mental condition characterized by mood instability, periodic updating dismorfomania phenomena, explosive, prone to hysterical forms of response. During the first 2 years of relapses syndrome, requiring hospital treatment.

Along with an exemplary embodiment of anorexia nervosa in clinical practice, there are varieties of this disease, with the most different from symptoms typical for pre-anorectic stage. It is primarily concerned with the reasons for refusal of food.

Self-restraint in eating may be due to fear of choking food or fear of vomiting in a public place in the presence of recorded vomiting reaction as a kind of hysterical forms of response to stressful situations in the structure of neurotic disorders. Among premorbid features in these patients can be identified demonstrative, Moderate self-centeredness combined with indecision, the tendency to doubt, uncertainty, with a tendency to fix attention on the sensations, to exaggerate the severity of somatic sensations. The mental state to the forefront the fear of nausea and vomiting (vomitofobiya). Patients live in constant fear of possible vomiting, resulting in severely limit yourself in food intake or completely refuse to eat. With increasing fatigue somatogenetic as it leveled earlier and hysterical personality traits to the fore inhibited personality traits: anxiety, uncertainty, exhaustion, hypochondriacal. Despite the significant weight loss due to the restriction of food intake, these patients rarely comes amenorrhea. Depletion usually does not reach cachexia. However, in the more remote stages of the disease in these patients may be formed a special relationship to their appearance without the desire to get better, even though underweight.

Also, refusal to eat may have a delusional reasons not related to the patient's appearance. Most often, this hypochondriacal delusions ("not digested food" contained in food substances "violate the metabolism, spoil your skin" and so on. D.). Refusal to eat can be formed under the influence of imperative accusing or olfactory hallucinations, as well as being a manifestation of catatonic negativism. In schizophrenia, the symptoms are more pronounced dismorphophobic, refusal to eat is replaced by the ridiculous, pretentious' eating behavior. " Vomiting as vomitomania with bliss, ecstasy. Refusal of food is not accompanied by internal strife. Appetite is reduced quickly. Observed thought disorder, obsessive-compulsive phenomena, depersonalization, senestopathia. Noteworthy is the dissociation between the pursuit of harmony, grace and sloppiness, slovenliness. Falling activity observed at the early stages of the disease, coupled with the rapid increase in isolation, coldness and bitterness of the family.

In the formation of the syndrome of anorexia nervosa can be controversial and the role of affective disorders. In some cases, depressive syndrome is the first clinical manifestation of the disease, and dismorphophobic –dismorphomanic disorders are an integral part. In this embodiment, the onset of the disease clinical signs of depression quite pronounced, although often do not receive the full syndromal completion. Mood fluctuations, decreased mood, drop in performance, mental activity determines an initial period of the disease.

The diagnostic criteria for anorexia nervosa.

One of the important aspects of anorexia nervosa remains its nosological accessory. Anorexia nervosa syndrome occurs in a number of neuropsychiatric diseases: neuroses, psychopathy, neurosis-like schizophrenia, organic neuro-endocrine. Many authors regard anorexia nervosa as an independent disease, which is reflected in the ICD-10, where anorexia nervosa, made a separate nosological unit and is defined as frequent eating disorder characterized by a significant loss of body weight due to the refusal of food.

As part of the ICD-10 diagnostic features obligate anorexia nervosa is:

1. Body weight is maintained at a level of at least 15 % lower than expected (higher level has been reduced or has not been reached) or body mass index Kveteleta is 17.5 or lower (this index is determined by the ratio of body weight in kilograms by the square of height meters). In prepubertal age may show failure to gain weight during growth.

2. Weight loss is achieved by the patient by avoiding food that is "full", and one or more of the following methods: induction at vomiting, laxatives, excessive gymnastic exercises; use of appetite suppressants and / or diuretics.

3. The distortion of body image takes a specific psychopathological form in which the terror of obesity is stored as intrusive overvalued idea and the patient considers himself only valid for low weight.

4. Total endocrine disorder involving the hypothalamic-pituitary axis, gonads and manifested amenorrhea in women, and in men loss of libido and potency. The obvious exception is the preservation of vaginal bleeding in anorectic women who are on hormone replacement therapy, often received a contraceptive purpose. There may be increased levels of growth hormone and cortisol levels, changes in the peripheral metabolism of thyroid hormone and abnormalities of insulin secretion.

5. Manifestations of puberty are delayed or not occur (growth ceases, the girls do not develop breasts and there is a primary amenorrhea, and delayed growth in boys' genitals). When recovery puberty is often completed normally, but the girls first menstruation occurs late.

When you install the diagnosis of anorexia nervosa should be remembered that patients with this disorder are often secretive, deny their existing symptoms and resist treatment. In almost all cases it is necessary to close relatives or confirmed history. In addition to the assessment of mental status is necessary to conduct a thorough physical and neurological examination of the patient, as well as to appoint a series of laboratory tests to assess the metabolic processes.

Principles of therapy of patients with anorexia nervosa.
The main provisions of the introduction of patients with anorexia nervosa

Treatment of eating disorders is based on a combined (multimodal) model. The therapeutic strategy is determined by the severity of the disease and the specific diagnosis of an eating disorder. In anorexia nervosa are the key components of improving physical health, cognitive, behavioral, and family therapy, while pharmacotherapy is symptomatic and is regarded as an adjunct to other therapies. Are essential components of the treatment and nutritional rehabilitation measures aimed at the restoration of body weight.

Depending on the conditions of patients with anorexia nervosa treatment can be carried out as an outpatient or in station conditions. However, according to local researchers and clinicians, the treatment is advantageously carried out in a psychiatric hospital. In cases where anorexia nervosa threatens the life of the patient (body weight is reduced by 40 % or more, are expressed somatic disorders), require emergency aid, including assistance to forcibly.

Building a therapeutic plan for the treatment of patients with anorexia nervosa should start with the evaluation and monitoring of the general state of the patients, during which it is recommended to pay special attention vital manifestations, physical status (including height and weight), heart rate and rhythm, noise in the heart (especially mean systolic heart extension cordial tone or noise with mitral valve prolapse), acrocyanosis, of delayed capillary refill, lanugo, salivary gland enlargement, signs of self-injurious behavior (bruises, linear scars, marks of cigarette burns), muscle weakness, manifestations of hypokalemia symptoms of Chvostek and Trousseau, characteristics of gait and ocular pathology.

The first step is to determine the patient's her ideal weight. Widely used body mass index (BMI), calculated by dividing weight in kilograms by height in m^2. In adults, food is considered to be at low BMI less than 18.5 kg / m^2. Children with a BMI of less than 5 % of the normative regarded as not get body weight.

It recommended detailed laboratory evaluation at the initial examination and on admission, as well as the conduct of biochemical monitoring in the early stages of refeeding.

Examinations recommended for hospitalization.

***Mane examination**:* general blood analysis; presence of urea and electrolytes; calcium; magnesium content; phosphate content; glucose; blood serum proteins; liver function; electrocardiogram; vitamin B_{12}, folate; study of thyroid function.

***Complementary examination**:* creatinekinase; erythrocyte transketolase / serum thiamine; dual energy X-ray absorptiometry; plasma zinc.

Recommended biochemical monitoring in the early stages of refeeding.

***Daily**:* The control of the content of urea and electrolytes; calcium; magnesium; phosphates; glucose.

***Weekly**:* liver function tests; serum proteins; general blood analysis.

***Less**:* control of folate; ferritin.

Depending on the patient's condition may require additional study.

When evaluating and monitoring the mental state of the patient and his security analysis subject are medical history, signs and symptoms associated with the mental state that often comorbid with eat-

ing disorders (eg, mood disorders, anxiety and abuse of substances) disorders, as well as personal characteristics and deviations that significantly affect the course of the disease and its outcomes. Motivational status of patients is no less important because it determines their ability to be involved in the therapy process. Patient safety includes both physiological and mental health settings, in particular the possibility of suicidal thoughts and suicidal ideation, as well as impulsive and compulsive self-injurious behavior.

Selecting the conditions of treatment and the decision on the need for hospitalization based on the physical, mental and behavioral factors, including rapid or steady decline in food intake, ongoing weight loss, despite the measures taken by the ambulatory accompanying psychiatric problems.

The changes of vital displays which indicate the need for urgent hospitalization, include orthostatic hypotension with an increase in heart rate of 20 beats / min or a fall in blood pressure in the standing position at 20 mm Hg. Article; bradycardia with a heart rate less than 40 beats / min; tachycardia more than 110 beats / min; or the inability to maintain a patient's core body temperature.

Body weight of the patient in isolation should never be a criterion for hospitalization or hospital discharge. Patients must not only gain weight, but to learn before discharge to store it, otherwise they will immediately reduce caloric intake to a level that it is unable to hold the. Patients with lack of proper motivation and support are at a high frequency of early recurrences.

It should be noted that the majority of patients with anorexia nervosa can be treated successfully as an outpatient procedure, with due provision of a holistic approach to therapy, including both consultations on power correction, medication and psychotherapeutic support, which should continue for at least 6 months.

Comprehensive treatment for anorexia nervosa includes activities aimed at the restoration of power, the impact of psychosocial and pharmacotherapy. The main objectives of therapy as follows:

1) patients achieving a healthy body weight (associated with the return of normal menstruation and ovulation in women, normal sexual desire, and hormone levels in men);

2) relief of physical complications;

3) increase the motivation of patients to cooperate in the restoration of healthy eating patterns and participation in treatment;

4) training of patients with a healthy diet and eating and a number of others.

The first step of treatment of patients with anorexia nervosa is to convince the patient and relatives in need of treatment and talk about it in detail. This may require a lot of time and effort, because patients usually underestimate the danger of his condition.

Nutritional rehabilitation

Nutritional care of patients suffering from anorexia nervosa, is an important part of their treatment. Nutritional intervention should be considered within the overall context of the patient's psychological. The main purpose is to correct body composition, but it is possible only if the correct cell functioning. This requires a correction to achieve a biochemical disorders weight gain. To determine specific protein deficiency, fatty acids and trace elements, use history collected nutritionist supply that provides information on the fluid consumption of caffeine and alcohol use, smoking, use of vitamin supplements and the results of measurement of weight and height.

Nutritional rehabilitation is aimed not only at restoring the body weight, the normalization of eating behavior, but also the formation of adequate perception of hunger and satiety, correction of psychological consequences of malnutrition. To enhance the effectiveness of restorative nursing program is offered to use a system of positive and negative reinforcement, the intensity of which can be changed as to achieve their goals.

In drawing up the initial diet for the patient should be calculated and the amount of dietary energy that should meet or slightly exceed its energy costs.

Actual results of the planned weekly control of weight gain should be about 900–1400 grams for inpatients and about 500–900 g for participants of outpatient programs. Patients gaining 1800–2300 g in 1 week, should be carefully evaluated for refiding syndrome and fluid retention.

To determine the initial calorie diet is used the value of the energy cost. Caloric expenditure determined by age, height, sex, and weight of the present. Their assessment is needed to control weight gain. To calculate the basic energy expenditure in normal practice, you can use the Harris-Benedict equation:

Women BEE = 655 + (9.6hM) + (1.8hH) – (4.7hA)

Men BEE = 665 + (13.7hM) + (5hH) – (6.8hA)

Legend: M-current body weight in kilograms; P- height, cm; A-age years, the BEE-basic energy expenses.

This largest major energy costs add another 30, 50 or 100 % in the case of sedentary lifestyles, moderate activity or strenuous activity, respectively.

Starting caloric also will depend on the degree of cachexia patients, the severity of secondary somato-endocrine shifts. Indicator calorie food intake typically first treatment is 30–40 kcal/kg per day (about 1000–1600 kcal per day), progressively increasing up to 70–100 kcal / kg per day. A further increase in the diet should be individualized, respectively, a raise of patient body weight and energy costs. Most patients give quite satisfactory weight gain with diet 3000–3600 kcal. Men to restore body weight needs to be significantly more calories.

In patients with severe cachexia (weight loss more than 30–40 % of the original) in the first weeks of treatment may not be weight gain, and sometimes observed decrease it. Falling weight usually occurs due to the disappearance of edema, which patients often come to treatment, or which occur in the first days of hospitalization, against the backdrop of changing patient nutrition. Particular attention should be paid to patients not gaining weight. The lack of weight gain at the beginning of treatment may be associated with different actions of patients who experience a strong fear of weight gain, they can throw out food, vomit, resort to frequent physical exercise or other forms of physical activity, but some of them actually revealed increased intensity of metabolic processes. To increase the caloric advantageously administered vitamin and mineral supplements. In critically ill patients should limit physical activity, which should strictly correspond to the quantity of food intake, and take into account the bone mineral density and cardiac function.

It is necessary to pay special attention to the dynamics of the patients in the course of nutritional therapy. Possible changes in the associated affective and anxiety disorders. If in the initial stage of the restoration of body weight can be reduced due to lack of food apathy and lethargy, then later, with the advent of the patients sensation of weight gain, it is possible intensification of anxiety and depressive symptoms, irritability and sometimes suicidal thoughts.

Increased body weight leads to a reduction of the majority of physiological complications of starvation, including improved electrolyte performance, heart and kidney function, concentration. However, the first resumption of feeding may be accompanied by adverse events, some of them can be heavy, so it is strongly recommended to start a health food with a small amount of food and gradually increasing its controlling somatic condition of the patient. A sudden increase in the metabolic load may provoke biochemical decompensation, and excessive protein intake is dangerous for patients with impaired renal or hepatic function. During refeeding possible violations of electrolyte metabolism, which are sometimes collectively referred to as "refeeding syndrome".

The initial stage of the resumption of power may be accompanied by mild transient, and in patients who abruptly discontinued use of laxatives and diuretics, a long-term (over several weeks) tendency to fluid retention, presumably due to the retention of salt and water, caused by an increase in aldosterone levels, is associated with chronic dehydration. Often there is edema. Patients may experience pain and a feeling of bloating when eating due to gastrointestinal dysfunction, characteristic of malnutrition.

Dangerous complications of refeeding in patients with anorexia nervosa can be hard refiding – a syndrome that occurs in patients with low body weight (typically less than 70 % health), with the use of enteral and parenteral feeding, which is carried out in a very short period of time, or prescribe intensive mode Rehabilitation nursing. The syndrome includes hypophosphatemia, hypomagnesemia, hypocalcemia and fluid retention, and sometimes thiamin failure. Overly rapid resumption of feeding, nasogastric and parenteral feeding are a potential hazard of acute fluid retention, occurrence of cardiac arrhythmias, heart failure, respiratory failure, delirium, seizures, rhabdomyolysis, dysfunction of red blood cells and the threat of sudden death, especially in patients with the lowest weight. In these cases, the addition of phosphorus, magnesium and / or potassium necessary.

1) dehydration and electrolyte disorders;

2) accompanying emergency somatic pathology, which can not be cured under dystrophy;

3) the ineffectiveness of other treatments.

The decision on the appointment of tube feeding refers to the number of complex and difficult, so always be taken with caution. This procedure is necessary in the case when it comes to maintaining the patient's life, but it can be practiced in a short period of time a minimum. If a decision on the need tube feeding, usually prefer a nasogastric route. In patients who are in critical condition, tube feeding allows to achieve a higher degree of control over food intake. Tube feeding can be very helpful in the recovery of weight in a short period of time, but it does not require the patient's active participation in the process of recovery and, therefore, plays a limited role in the long term. Therefore, it is recommended to hold it until the patient persists danger to physical health (for BMI 14 kg/m^2) rather than continue as long as a normal weight is achieved.

Tube feeding should be administered via a nasogastric tube of small diameter (5–9 FG). During use, the probe should be checked each time its position along the length of the outer portion and validate the introduction of pH measurement or X-ray. Use standard isotonic – 1 kcal / l (4.2 kJ/ml) – food. Concentrated mixture useless, they cause excessive osmotic load for the intestine and excessive water load on the kidneys.

Chance of a number of modes. Tube feeding can be carried out continuously for 20 of 24 hours per day with a four-hour rest at night. In other cases, you can stop the feeding at mealtimes to allow the patient to continue to have their own. Feeding should be started with low intensity to minimize the risk of complications.

It is important to encourage patients to eat food, despite nasogastric feeding if they are physically able to tolerate it. In the early stages of tube feeding patients often feel worse, not better. It is useful to explain the reasons for patient discomfort experienced by them (bloating, fluid retention, rapid weight gain), and soothe him. Information on feeding mode and time will increase, can serve as a stimulus for the patient to increase oral intake, with the understanding that the tube feeding rate will decrease with increasing body weight. resumption meal planning should begin immediately, as soon as the tube feeding will be conducted on an ongoing basis. It is important to explain the plan to the patient and, if appropriate, his family. In passing it is recommended to reduce the tube feeding to oral diet gradually to prevent sharp reduction in weight and allow the patient to compensate by increasing food intake.

As an alternative to nasogastric feeding in very difficult situations, when a patient has a physical resistance and constantly pulls the probe, allowed the introduction of a surgical gastrostomy and eyunostoma, but it is justified only when the patient's persistent refusal of oral feeding. Force-feeding of children and adolescents is permissible only if their condition is life threatening for.

Psychotherapeutic treatment of patients with anorexia nervosa

The aim of psychotherapy in the treatment of patients with anorexia nervosa is to help patients:

1) start consciously cooperate in nutrition and physical rehabilitation;

2) change the dysfunctional behavior and attitude towards their existing malnutrition;

3) to improve interpersonal and social functioning;

4) impact on comorbid psychopathology and psychological conflicts that may exacerbate or contribute to the maintenance of eating disorders.

The use of individual therapy in the acute phase of restorative feeding is most effective. Complex therapeutic programs of patients with anorexia nervosa during recovery of the body weight, primarily include behavioral therapy using exercise, bed rest, various reinforcing stimulus (reward) to achieve the target weight and the desired behavior, in order to effectively increase the weight, warnings binge eating and purging of; family therapy, which is especially effective in patients younger than 18 years and is aimed at correcting violations of relations within the family, leading to the development of the disease. For teens who are treated stationary, participation in psychoeducational programs can contribute to weight gain and be as successful as the more intensive forms of family therapy.

After the restoration of body weight, given the protracted for anorexia nervosa, patients need long-term support and continuation of therapy up to 1 year or more. At this stage in adult patients with anorexia nervosa preferred individual cognitive-behavioral therapy, which can help reduce the risk of recurrence and improve outcomes.

Cognitive therapy is aimed at correcting distortions of cognitive structures in the form of perception itself thick, the definition of self-worth solely on the image of his body and a deep sense of inferiority and inefficiency. One of the elements of cognitive therapy is cognitive restructuring. With this

approach, patients must find the specific negative thoughts, make a list of evidence to support these ideas and a list of evidence to refute these ideas and use it to manage their own behavior. Another element of cognitive therapy – problem solving. Develops different solutions, considering the likely effectiveness and feasibility of each solution to the problem, chooses the best defines the stages of implementation of the decision, implement it and then evaluates the entire process of solving the problem on the basis of their results. Another essential element is the monitoring of cognitive therapy: the patient must make daily entries in respect of meals, including the type of eaten food, meal times and the environment in which the fear of the food taken.

In patients who have difficulty in describing their problems, also used non-verbal therapeutic techniques (art therapy, movement program). At various stages of healing therapy is useful employment.

Medication treatment

Pharmacotherapy anorexia nervosa used is limited, but it is necessary in conjunction with the above-described therapies in cases where only a nutritional rehabilitation programs are not sufficiently effective in restoring normal body weight of the patient or if the patient in severe comorbid symptoms. Since the latter, as well as the symptoms of anorexia nervosa, may reduce with weight gain, the decision on the use of psychotropic drugs should, if possible, take no earlier than the patient's body weight is restored.

In severe somatic condition of patients psychopharmacotherapy contraindicated. Limited are used to remove the anxiety and fear on the eve of receiving tranquilizers food (phenazepam, lorazepam). Metoclopramide is usually used in the swelling of the stomach and abdominal pain, leading to gastroparesis and early satiety. However, when prescribing doctor should be aware of the possibility of extrapyramidal disorders in patients with low body weight. When improving the overall physical condition of the currently used modern atypical antipsychotics, such as olanzapine, quetiapine, risperidone, effectively reducing high levels of anxiety, obsessive-compulsive manifestations, contributing to inadequate self-correction and similar psychotic disorders of thinking and weight gain. Not bad proven antidepressants and especially drugs of serotonin reuptake inhibitors (fluoxetine, paroxetine, sertraline, citalopram, escitalopram), as well as mianserin and others. These drugs are appropriate to prescribe for preventing resumption of disorders in patients with normalized body weight and for the treatment of observed anorexia nervosa depressive and obsessive-compulsive symptoms. In the treatment of anorexia nervosa with hypochondriac and paranoid disorders prescribed buteropheron line, risperidone.

It is good to keep in mind that low-power, patients are more prone to the side effects of medication. Thus, the use of tricyclic antidepressants may be associated with a higher risk of hypotension, heart arrhythmias, especially in patients with a cleaning behavior. It should, if possible, to avoid their appointment to patients with low body weight or the risk of suicide. Serious adverse effects are possible in the appointment of patients with anorexia nervosa and some other antidepressants. Bupropion increases the risk of seizures in patients with eating disorders, especially in the cases of binge-purge. Mirtazapine is associated with weight gain, increases the risk of developing neutropenia. When using antipsychotic drugs should be considered the possibility of developing extrapyramidal disorders, effects on insulin sensitivity, lipid metabolism and QT-interval duration.

Also in the medical therapy of patients with anorexia nervosa should include products that will improve the metabolic processes in the brain with neuroprotective and vasoactivated action, and if there are indications – and dehydration therapy.

After discharge from the hospital takes a long out-patient treatment. His goal – to achieve a healthy weight and maintaining it for at least 6 months. The basis of outpatient treatment – psychotherapy. After the restoration of body weight in a hospital for people with anorexia nervosa should be offered a course of psychotherapy on an outpatient basis, which focuses on eating behavior and attitudes to weight and shape, as well as on more general psychosocial problems, combined with a regular assessment of the deterioration of the risk of a physical, and mental health. The duration of the course of outpatient psychotherapy and somatic status check after weight restoration in a hospital should normally be at least 12 months.

SLEEP DISORDERS INORGANIC NATURE

The etiology of sleep disorders is inorganic sleep disorders arising from psychogenic factors include

Dissomnia – primary psychogenic condition under which the main ones are emotional disorders caused by the quantity, quality or sleep time. Insomnia, hypersomnia and disorders of the cycle sleep – wakefulness.

Parasomnia – occurring during sleep episodic abnormal condition, namely, sleepwalking, night terrors and nightmares, as children, they are mainly related to the development of the child.

Clinical picture

Not organic insomnia' nature.

It is characterized by short-lived episodes of insomnia, as a rule, is connected with anxiety, caused by stressful events, significant changes in life or their expectations (for example, exam).

Insomnia typically begins in a stressful situation, and continues after its finish. The child in this case is sometimes able to sleep in a situation where he would not like that, for example, during TV viewing. Repressed any activity, subjective anxiety can not be felt by patients, it is believed that the psychological problems they have, and they can not get to sleep only because of their disturbing intrusive thoughts. During the day, characterized by a sense of physical and mental fatigue, tension, irritability, and constant concern about the upcoming insomnia.

The shortening of sleep may be due to certain physiological conditions. This often episodes of apnea (apnea) due to closeness and lack of oxygen saturation, and heart rhythm disorders, or jerking of muscles of the lower limbs (myoclonus).

Not organic hypersomnia nature.

Hypersomnia. Insomnia occurs much less frequently. It includes complaints as unnecessary (not corresponding to the normal for the child) the duration of nocturnal sleep and sleepiness (somnolence) during the day, not accompanied by violation of the architecture and physiology of sleep. Somnolence is characterized, in addition to subjective sleepiness, sleep attacks, objective trend suddenly and involuntarily fall asleep in the school classroom, in the community. It manifests itself in the afternoon, regardless of duration of sleep a night. This term does not apply to the states just fatigue, physical exhaustion.

Disturbances of sleep-wake mode not organic nature.

The main clinical manifestation is the inability to fall asleep or wake to keep in line with the natural circadian rhythm. The child is quite able to sleep or stay awake at a different time of day, in principle, distinguishes the disorder from both insomnia and hypersomnia from.

Often it is because of the frequent distortion of the daily regime (for example, changing time zones). The main symptoms are intermittent signs of insomnia and sleepiness, but after some time increases the probability of joining the somatic complications. The symptoms disappeared spontaneously in 2–7 days after the flight, depending on the direction of flight and individual sensitivity and do not require specific therapy.

Because disturbances of circadian rhythm insomnia symptoms occur during the period of the main symptoms of sleep and hypersomnia during waking periods – almost daily for at least a month or repeatedly in less prolonged periods of time; poor durability, quality and distribution of daily sleep cause children clear subjective suffering.

Sleepwalking (somnambulism).

Deep the REM-phase (stages 3 and 4, the slow-wave-sleep or delta), the first third of nocturnal sleep, ie, in the first 3 hours after falling asleep, may be accompanied by the leaving of the bed and complex behavior without going into the waking state. Sometimes these disturbances provoke by the need to urinate in asleep state and finished without recollection when person back to his bed.

This type of behavior characterizes by unresponsive to surroundings and other people, walking around, familiar to the subject action (dressing, washing, making breakfast and so on). When waking up immediately after sleepwalking, or the next morning this episode becomes amnestic.

The disorder begins in the 6–12 years old and is rarely delayed until adolescence and young age. Condition triggered by stressful situations, fatigue, and prior sleep deprivation. It is possible that the disorder is not purely psychogenic, and that it is based on subtle neurological abnormality, as patient's families, it is noted more frequently than in the general population; provoking factor appeared frequently febrile state.

From time to time, these incidents present in 15–20 % of people. That cases left unknown and without treatment, if person don't provoke self-injury or some ham to another one.

Sleepwalking treatment.

The most important thing is decrease contact with specific trigger factors, increase safety for sleepwalk. Drug treatment the same for night terrors.

Night terrors.

Night terrors are recurrent episodes of abrupt awakening. Such people wake up in the first third of the night, with scream, fear, autonomic activation, unresponsiveness to comforting consolation, confusion/ disorientation, vague recall and without detailed recall. Person sits up I his bed and shout, may be present automatic actions (try to run away, escape, jumping to the window). These phenomena more dangerous in adults (severe injury or death), especially in patients with depression and anxiety.

Night terrors we can see in 30–40 % of children, in adults (near 2 %, which had Night terrors or sleepwalking in childhood) – in stressful life. We can't see some gender specific, but peculiarities of family story are present. As etiology they mark incomplete arousals from slow-wave sleep with "switched off cognitive function" plus subcortical arousal (anxiety center).

Nightmares.

They appear more frequently during periods of stress, illness; some persist throughout life, repeating content. Like other dreams, nightmares observed during REM-sleep phase, but unlike other parasomnias are more common in the second half of a night's sleep. The awakening is accompanied by vivid and detailed memory of the nightmares, containing mostly a threat to his own life, safety, or the feeling of self-worth, after the episode quickly restored the waking state, and all kinds of orientation.

Therapy

When the correction of sleep disorders inorganic preferred non-drug methods of influence, first and foremost the normalization mode of the day.

Psychotherapeutic techniques – various relaxation techniques

Drug notebook Edit – benzodiazepine tranquilizers, hypnotics, tricyclic antidepressants.

PSYCHOSEXUAL DISORDER

This is a group of disorders that includes several species of different etiopathogenesis and clinical manifestations of sexual behavior disorders. These include:

– Violation of rates and terms of psychosexual development (delayed psychosexual development, premature psychosexual development).

– Deviations of psychosexual development.

Violation of the pace and timing of psychosexual development. Premature psychosexual development. Sexual desire is far ahead of other manifestations of sexuality and to 10 years of age may reach the level of sexual fantasies. By this age is the formation of secondary sexual characteristics. These children show an early interest in sex life, frequently seek out adolescents and sometimes adults who were willing to intimate contact. One of the manifestations of premature psychosexual development can be earlier prepubertal masturbation.

Delay of psychosexual development. This type of disorder is manifested in the formation of lag terms of sexuality the child's age. The reason may be somatic disorders: gross endocrine disorders, psychogenic factors – when pathocharacterological shaping personality and psychopathy (especially inhibited circle) sociogenic that arise as a result of the impact of micro social environment, improper sex education by parents and teachers. Such individuals later become sexually active, and its absence is transferred safely.

Deviations of psychosexual development (sexual perversion). They are also called sexual perversion – they are a pathological orientation of sexual desire and distorted forms of its realization. Distinguish true perversion in which sexual desire is realized only perverse way, replacing the normal sexual life. When false perversions satisfaction of sexual desire is carried out by a perverted because of objective obstacles to the normal sexual life (isolation in same-sex teams, etc.). In addition, there are sexual perversion in which the broken or replaced by an object of sexual desire. These include: homosexuality, pedophilia, Old women, bestiality, necrophilia, fetishism, exhibitionism and sadism and masochism.

Etiology and pathogenesis. The etiology and pathogenesis of sexual disorders hold a special place neuroendocrine disorders, constitutional-genetic, psychogenic factors and environmental conditions.

Treatment. For medical and corrective measures psychosexual disorders include various types of psychotherapy to conduct explanatory conversations, environmental sanitation, and in some cases, medication.

Expertise. Patients are able to work, may be called upon to serve in the army, a forensic psychiatric examination found sane and capable.

MENTAL RETARDATION, CLINICAL MANIFESTATIONS. THERAPEUTIC AND CORRECTIVE ACTIONS

Oligophrenia is dementia which is congenital or acquired at early stages and manifesting itself by general psychic underdevelopment and intellectual defect. Oligophrenia belongs to personality pathology; it is notable for a stability of the state and no progradiency of its course. Oligophrenia is considered as a dysontogeny and regarded as an abnormality manifesting itself by underdevelopment of the personality and the organism at large.

At present, the aspects of the diagnosis and medical-corrective measures for oligophrenia are rather crucial from both the medical and social viewpoints. Taking into consideration the multiple etiological origin of the mental deficiency and the character of the factors involved, it becomes possible to carry out different variants of preventive measures. Besides, rehabilitation is one of promising directions of the modern medicine, requiring a high and versatile qualification of medical specialists.

Recent decades have revealed a tendency to an increasing index of oligophrenia morbidity rate. It may be caused by a better level of revealing people with a mental deficiency, as well as by achievements of the modern medicine directed at a higher survival rate of children with various abnormalities, and first of all in the central nervous system. Oligophrenia is much better revealed starting from the age of 7–8 years (beginning of school studies), and at the period of calling up for military service (17–18 years). According to the WHO's data, the morbidity rate of oligophrenia all over the world is from 1 % to 3 %, it being 1.5 times higher among males versus females.

The morbidity rate of clinical forms of oligophrenia among people with a mental deficiency is as follows: 75 % for debility, 20 % for imbecility and 5 % for idiopathy. As it is seen from the above data, the dominating group consists of people with a mild degree of mental deficiency, which does not hinder a satisfactory, or sometimes even complete social adaptation.

***Etiology and pathogenesis*.** At present, we know about 400 pathogenic factors, which, producing their effect at different stages, are able to affect the process of embryogenesis. On the whole, all the etiological factors, capable of causing psychic underdevelopment, may be conventionally divided into 3 groups:

1) oligophreniae caused by factors of the endogenous origin, i.e. hereditary, as predisposed by a pathology of the parents' sex cells, e.g. Down's syndrome, Klinfelter's syndrome, Turner's syndrome, microcephaly, enzymopathies, etc.;

2) oligophrenia caused by a pathogenic influence during embryo- and foetogenesis, i.e. embryo- and foetopathies (caused by infectious, viral, somatic diseases, hormonal disorders, intoxications, erythroblastosis faetalis, gestoses of pregnancy, etc.;

3) oligophreniae caused by pathologic labour and diseases of early childhood (up to the age of 3 years), i.e. asphyxia, birth injury, neuroviral infections, brain injuries, intoxications, states of clinical death.

A leading part in the pathogenesis of oligophreniae is played by a so-called chronogenic factor, i.e. the period of ontogenesis, during which a developing brain was affected. Different noxious factors, acting at the same period of ontogenesis, may cause similar disorders in the brain, while the same pathological factor, acting at different periods of ontogenesis, causes different consequences and different clinical manifestations. It is due to the fact, that during ontogenesis two mutually related processes take place: formation of tissues (histogenesis) and formation of structures (morphogenesis). The appearing biochemical imbalance disrupts correct functioning of cellular metabolism.

Classification of clinical manifestations.

The classification of oligophreniae entails some difficulties owing to a variety of its etiological factors and clinical forms. Even by now, no single classification has been made yet. But the most common thing is to separate oligophreniae by the degree of the intellectual defect, since it is principally important for solving the problem of teaching oligophrenia patients and their social adaptation. According to this classification, there are three degrees of mental deficiency:

a) debility (it corresponds to a mild degree of mental deficiency in ICD-10);

b) imbecility (it corresponds to a moderate degree of mental deficiency in ICD-10);

c) idiocy (it corresponds to a severe degree of mental deficiency in ICD-10).

Besides, there is *a classification of oligophreniae, based on the etiological principle*.

1. Hereditary predisposed metabolic disturbances and chromosomal diseases.

2. Various infections and intoxications, affecting within the period of intrauterine development and the first year of life.

3. Irradiation of pregnant women.

4. Immunological incompatibility of tissues of the mother and foetus.

5. Various malnutritions of the developing organism. Particularly important here is oxygen deprivation of the developing brain.

6. Incomplete pregnancies, mechanical injuries during delivery; to a less degree – caused by contusions of the pregnant women and within the first year of the baby's life.

7. Influence of negative social-cultural factors.

Sukhareva G.Ye. (1965) differentiates oligophreniae by the temporal factor of the effect of some noxious agent. In this connection, all clinical forms of oligophreniae are divided into 3 groups.

1. Oligophreniae of the endogenic origin (they result from involvement of the parents' generative cells). They are subdivided into:

a) Down's syndrome (and other oligophreniae caused by chromosomal aberrations);

b) true microcephaly;

c) enzymopathic forms of oligophrenia with different hereditary disturbances of metabolism (of proteins, carbohydrates and fats);

d) clinical forms of oligophrenia, characterized by a combination of mental deficiency with a dysplasia of the bone system and skin (dysostotic, xerodermal oligophreniae).

2. Embryopathies and foetopathies:

a) oligophrenia, caused by rubella at the period of pregnancy;

b) oligophrenia, caused by other viral infections (cytomegaly, influenza, parotitis, hepatitis);

c) oligophrenia, caused by toxoplasmosis, listeriosis;

d) oligophrenia, caused by congenital syphilis;

e) oligophrenia, caused by hormonal disturbances in the mother;

f) oligophrenia, caused by rhesus-incompatibility between the mother and the foetus.

3. Oligophreniae, caused by a pathology during the delivery and postnatal period:

a) oligophrenia resulting from asphyxia and a birth injury;

b) oligophrenia, caused by a brain injury at the young age (before 3 years);

c) oligophrenia, caused by some neuroinfection at early childhood (meningitis, encephalitis, arachnoiditis).

Besides the above mentioned, still there are also undifferentiated forms of oligophreniae, whose etiological factors have not been studied by now yet.

***Clinical manifestations*.** The clinical picture of oligophrenia is rather heterogeneous owing to a variety of its clinical forms. The main peculiarity of oligophrenia consists in its diffuse "total" underdevelopment, when the whole psyche of the human being is affected: his cognitive activity, emotional-volitional sphere, thinking, memory, attention, speech, motility. A primary defect in the development of more differentiated and ontogenetically younger functions (thinking and speech) with a relative preservation of more ancient functions and instincts is another peculiarity of oligophreniae.

Also, oligophrenia have somatic signs, most frequently manifesting themselves by developmental defects. Widely common are sense organ defects (of vision and hearing), abnormalities in the maxillofacial region (cleft palate and cleft lip), internal organs (the heart and major vessels, gastrointestinal tract, urogenital system, respiratory organs), developmental defects of the locomotor system

(contractures and dislocations of joints), vertebral pathologies, syndactylies, oligo- and polydactylies, etc. No specific neurological picture in oligophrenia is observed, but, as a rule, there are signs of diffuse symptoms: changes from the part of reflexes, hypotony, blepharoptosis, strabismus, slight pareses, etc.

Intelligence quotient (IQ), which is determined with help of Wechsler's experimental-psychological technique and expressed by a quantitative coefficient, is one of the main criteria for diagnosing oligophrenia. By the degree of expressiveness of an intellectual defect, three grades of mental deficiency are separated.

Debility is a mild degree of mental deficiency with IQ of 51–70. It is characterized by insufficiently developed abstract-logic thinking, an inability to separate the main from the minor; with good mechanical memory the thinking remains concrete, but the creative thinking is absent at all. The speech is poor, primitive, stereotyped; the morons may master humanitarian subjects at school, but demonstrate their complete insolvency in studying exact sciences. They are able to study only by the syllabus of an auxiliary school, master simple labour skills, orientate themselves well in everyday problems. They may make families, keep house, and have complete social adaptation.

Imbecility is a moderate degree of mental deficiency with IQ of 21–50. The thinking of imbeciles is concrete and stiff, the speech is poor and inarticulate, the vocabulary stock is limited by 20–30 household words. The perception, memory and attention are essentially underdeveloped. Imbeciles are not able to study and master the syllabus of an auxiliary school, but master skills of service and simple physical actions, they may learn to write and count to 10; they are not independent in behaviour at all and need guardianship. Like morons, imbeciles are easily suggestible, may come under the influence of some criminal companies and even become accomplices in crimes.

Idiocy is a profound degree of psychic underdevelopment with IQ not more than 20. The thinking and speech are absent. Such patients produce only some inarticulate sounds, which, as a rule, are caused by instinctive reactions (hunger). The emotions are lower, primitive and entail satisfaction or dissatisfaction of instincts; eating of inedible things is observed. Idiots would not react to their relatives, do not recognize their mother, are not able to serve themselves and control their physiological functions. They absolutely need care, guardianship and supervision. The psychological defect, as a rule, is combined with an expressed systemic pathology and severe neurological symptoms (pareses, palsies), therefore they hardly live up to the age of 16–20 years.

Differentiated forms of oligophreniainclude nosologically independent diseases, where an intellectual defect is one of the most severe symptoms. There are 3 groups of such disorders:

1) endogenously caused forms of oligophrenia;
2) exogenously caused forms of oligophrenia;
3) mixed endogenously-exogenously caused forms of oligophrenia.

Exogenously caused forms of oligophrenia are hereditary forms, when an intellectual defect is caused by chromosomal aberrations and metabolic defects.

Down's syndrome results from a trisomy of the 21st pair of chromosomes, its morbidity rate among newborns is 1 per 700–1,000 cases, a risk of giving birth to a child with Down's syndrome significantly increases in those women who bear late (after the age of 40 years). An expressed intellectual defect, more frequently to the extent of imbecility or idiocy, significantly rarer to the extent of debility, is one of the main clinical manifestations of this syndrome. Typical is the complex of physical abnormalities, which makes the patients resembling one another: a small nose with a wide flattened bridge, an oblique shape of the eyes, small, deformed and low helices, a high "Gothic" palate, a "geographic" tongue. Developmental defects in the cardiovascular system and other organs are often revealed. Such patients are unable to study, need care and guardianship.

Turner's syndrome occurs in females, its morbidity rate is 0.3 per 1,000 newborn girls. Its clinical manifestations are seen at birth. The patients have a small weight and body length, a short and wide neck with a low growth of hair, a peculiar shape of the eyes, an epicanthus, a "sphinx's face". Skeletal deformities and internal organ abnormalities are observed. The intellectual defect is not sharply expressed, there is a level of some borderline mental deficiency or a mild degree of debility, seldom to the degree of imbecility.

Klinfelter's syndrome is observed in males with an additional X chromosome. The patients have a peculiar type of habitus: a large stature, narrow shoulders, a flat thorax, long extremities, weak muscles, underdevelopment of sex organs with resultant infertility. The intellectual defect is more often at the degree of debility.

X trisomy is observed in girls and women. Dysplastic signs, a retardation of physical development and a mild mental deficiency are observed. The fact that among X trisomy patients there are a lot of schizophrenics is worth of attention.

Phenylketonuria: the infants are born healthy, but owing to a deficit of the enzyme, which turns an amino acid phenylalanine into thyrosine, by the age of 3–6 months the infant develops a specific musty smell of urine, plumpness, listlessness, sleepiness, some delay in the psychomotor development; the intellectual defect may reach to the level of imbecility or idiocy.

Homocystinuria results from metabolic disturbances of methionine. Clinically it resembles Marfan's syndrome (a dysplastic form of the trunk), the intellectual defect is on the level of debility or mild imbecility.

Hurler's syndrome (gargoylism) belongs to mucopolysaccharidoses. The patients' appearance is peculiar: their body length is significantly less of the age norm, the head is relatively large, the neck is actually absent, the features are grotesque, the bridge of the nose is sunken, the lips and tongue are thick, the nostrils are turned out, the ears are low. An intellectual defect forms gradually, reaching to an absolute degradation by the age of 10–12 years and ends with a lethal outcome.

***Exogenously caused forms of oligophrenia*.** The syndrome of alcoholic foetus appears if a pregnant woman abuses liquor. It manifests itself by a retardation in the physical development, an intellectual defect, more often of a mild degree.

Rubeolar oligophrenia is an embryopathy caused by an effect of the rubella virus during the first trimester of pregnancy. An expressed intellectual defect is accompanied by severe developmental defects: of the organs of vision and hearing, locomotor system, heart.

***Oligophrenia in congenital syphilis*:** an intellectual defect is accompanied by neurologic symptoms and various developmental abnormalities (Hutchinson's triad).

Oligophrenia, caused by toxoplasmosis, is characterized by mental deficiency with developmental defects of vision, convulsive seizures, hydrocephaly, microcephaly, spastic pareses and palsies.

Oligophrenia, caused by listeriosis, results from having intrauterine meningoencephalitis of this kind. An expressed intellectual defect is accompanied by psychoorganic disorders.

Oligophrenia, caused by erythroblastosis foetalis, develops because of rhesus-incompatibility between the mother and the foetus: the rhesus-negative mother and the rhesus-positive foetus. The resultant haemolysis affects the cerebral cortex and basal ganglia of the cerebral hemispheres. The clinical picture is characterized by various degree of mental deficiency, defects of hearing, pareses, palsies, extrapyramidal disorders.

Oligophrenia, caused by pathologic labour (asphyxia, birth injury), results from cerebral hypoxia or intracranial haemorrhages. Along with a differently expressed intellectual defect (from debility to idiocy) there are various neurological symptoms (unexpressed forms of infantile cerebral paralysis, convulsive seizures, disturbances of innervation) and psychoorganic manifestations (motor disinhibition, cerebrasthenic phenomena, explosiveness).

***Oligophrenia caused by postnatal factors*.** The pathogenic factor may be represented by neuroviral infections, brain injuries, intoxications suffered within the first 3 years of life. As a rule, no congenital abnormalities and dysplasiae are observed; the intellectual defect chiefly depends upon the degree of expressiveness and localization of an organic lesion of the brain and may vary from a mild grade of debility to idiocy. Various neurological disorders and disturbances at the psychoorganic level are observed.

Mixed endogenously-exogenously caused forms of oligophreniadevelop as a result of some interaction of a genotypic failure and hazardous environmental factors.

Microcephaly is one of the most common forms among oligophrenics, who suffer from severe forms of mental deficiency (imbecility and idiocy).

True microcephaly is a hereditary predisposed form, mostly characterized by some mental underdevelopment without any neurological symptoms. The size of the cerebral skull is significantly smaller, the forehead is flattened, the helices are enlarged, the nose is prolonged.

Secondary microcephaly clinically differs from the true form by absence of an expressed difference in the size of the facial and cerebral skull, presence of neurological symptoms and convulsive seizures. It is characterized by the most severe grade of mental deficiency.

Hypothyroid oligophrenia (cretinism) results from hypoplasia or an absolute absence of the thyroid gland. An intellectual defect develops at the postnatal period; with an opportune diagnosis and replacement therapy it may be prevented. Untreated hypothyroidism gives rise to the most severe grade of mental deficiency. The patient's appearance is peculiar: his large tongue does not have enough place in the mouth, the bridge of the nose is sunken, the face is yellowish-sallow, the skin is dry, the hair is fragile.

Craniostenosis is a premature closure of cranial bones in newborns with disturbances in the growth and development of the brain, accompanied by an involvement of the central nervous system and formation of an intellectual defect.

Course. Till now, the main criteria of oligophrenia are as follows:

1) totality of mental underdevelopment with prevalence of weak abstract-logic thinking and lower expressiveness in disturbances of the intellect prerequisites and a relatively less severe underdevelopment of the emotional sphere;

2) nonprogradiency of the intellectual deficiency, as well as nonprogradiency of the pathological process which caused this underdevelopment.

But current achievements of medicine demonstrate correctness of these criteria only for certain forms, but not all the states, which are now regarded as oligophrenia. The study of etiology and pathogenetic mechanisms of certain forms of mental deficiency creates some possibilities for preventing the development of an intellectual defect or its progression. Such forms of oligophrenia as phenylketonuria, homocystinuria, gargoylism, other forms of mucopolysaccharidoses may serve as an example. The same thing concerns a number of exogenously caused forms of oligophrenia (pathologic labour, postnatal hazards).

Not a bit part in the positive dynamics of some forms of oligophrenia (as a rule, debility) is played by the proper upbringing and teaching of oligophrenics. Such a maximally organized approach contributes, though slowly, to an increase of their intellectual functions, motility of psychic processes, acquiring some stock of knowledge, development of the oral speech, reduction of locomotor insufficiency. Such people become able to work, and some of them acquire an absolute social adaptation. But the positive dynamics of oligophreniae may be broken by decompensation states, a leading part in their development being played by additional exogenous hazards (infections, intoxications, injuries, emotional overstrains, excessive demands) and periods of crises (oftener that of puberty, sometimes parapuberty). Decompensations are accompanied by worsening intellectual functions, appearance of cerebrasthenic, autonomovascular and convulsive manifestations, psychopathy-like forms of behaviour.

Besides, psychopathic decompensations also exist, they usually develop at the period of puberty and are termed as oligophrenic psychoses. They chiefly manifest themselves by affective disorders (depression with anxiety and fear, dysphoriae), twilight states of consciousness, rudimentary hallucinatory and delusional feelings, catatony-like states.

The treatment of oligophreniae should be complex, including medicamental, psychologopedagogical measures and those of upbringing. It is very important to start treatment in time. The drug therapy of oligophrenia is of a symptomatic character. Nootropic medicines (pantogam, nootropil, aminalon, cerebrolysin) are used for improving metabolic processes in the brain, as well as dehydrating drugs (magnesium sulphate, euphylline, glycerin, acetazolamide) and those with a resolving effect (potassium iodide, lidasa, vitreous body). If there are paroxysmal disorders, anticonvulsants are administered; oligophreniae, complicated by a psychopathy-like or neurosis-like syndrome, require using neuroleptic drugs (aminazine, Neuleptil, sonapax) in the first case, as well as tranquillizers and antidepressants (tazepam, phenazepam, hydazepam, amitriptyline, pyrazidol) in the second one. In phenylketonuria, a special diet which excludes any foodstuffs containing phenylalanine, is administered. For hypothyroid oligophrenia, substitution therapy with thyroid hormones is indicated.

Very important in oligophrenia are measures of upbringing and correction. Auxillary schools, directed at professional orientation and labour adaptation of people with a mild degree of mental deficiency, serve this purpose. Patients with imbecility and idiocy need care and guardianship.

Age-specific peculiarities. The main signs of some psychic underdevelopment usually become evident from the moment of the baby's birth or during its first year of life. As it was mentioned above, the crises of puberty and parapuberty may cause negative dynamics and decompensation states in the course of certain forms of oligophrenia. Besides, it should be noticed, that the lifetime of patients with

severe forms of oligophreniae significantly depends upon the severity of developmental abnormalities of their internal organs. Patients with idiocy may live up to 20 years, those with imbecility up to 40 years.

The outcome of oligophrenia directly depends upon its clinical form and the level of an intellectual defect. In mild forms of debility it is possible to observe "evolutive" dynamics and absolute social adaptation; severe forms of oligophrenia (imbecility and idiocy) have an unfavourable prognosis and outcome.

Borderline forms of intellectual deficiency (a delayed rate of psychic development).

This group of disorders include the states manifesting themselves by a mild degree of intellectual deficiency and taking an intermediate place between the intellectual norm and oligophrenia. The intellectual quotient (IQ) in these forms of disorders is 71–80. This is a rather versatile and heterogeneous group of disorders by both the etiological sign together with pathogenetic mechanisms and clinical manifestations together with an outcome. This is one of the commonest forms of psychic pathology in children. The urgency of these disorders nowadays is rather high, since their social significance is great. An opportune diagnosis and medical-corrective measures contribute to disappearance of clinical manifestations and create conditions for an absolute social adaptation of such people.

The epidemiology of borderline mental deficiency has not been established yet. It is caused by the fact that there are no clear clinical criteria for diagnosing this pathology. The intellectual quotient, as it is known, cannot fully reflect the level of psychic underdevelopment, especially as a significant part here is played by the social criterion. Borderline mental deficiency in children becomes noticeable at the age of 6 years, within the period of their preparation for school, and is finally revealed in young pupils. The statistic data concerning the morbidity rate of borderline mental deficiency are rather contradictory and have a broad range: from 2 % to 12 %.

***Classification of clinical manifestations*.** According to the systematization, based on the pathogenetic principle, all forms of borderline mental deficiency are divided into 4 groups:

1) dysontogenetic forms, where the deficiency is caused by the mechanisms of some delay or distortion in the child's psychic development;

2) encephalopathic forms based on an organic lesion of cerebral mechanisms at early stages of ontogenesis;

3) intellectual deficiency related to defects of analysers and sense organs (action of sensory deprivation);

4) intellectual deficiency related to defects of upbringing and information deficit from the early childhood.

Psychophysical infantilism is one of the forms of borderline mental deficiency. There may be harmonious, disharmonious and organic psychic infantilism. In the first variant, the emotional-volitional and personality immaturity are harmoniously combined with physical underdevelopment.

Disharmonious infantilism is characterized by either a normal or accelerated physical development against a background of the emotional-volitional and personality immaturity.

Organic infantilism results from some noxious effect produced on the brain at the perinatal period. The clinical-psychopathological picture of psychic infantilism is amplified by cerebrasthenic disorders (easy fatiguability, shortness of temper, exhaustibility of attention, autonomic dysregulation) and psychoorganic ones.

The retardation of psychic development caused by social deprivationforms in children because of some limitation of social contacts, in deformed and low-cultured families with absence of guardianship and upbringing. The stock of knowledge and notions about the environment in such children is lower of their age standard.

The retardation of psychic development caused by sensory deprivation develops in children having some pathology of their sense organs, i.e. those of hearing and vision. Realizing their insolvency, such patients are disposed to neurotic and pathocharacterological reactions.

An early diagnosis of borderline mental deficiency and its opportune medical-pedagogical correction contribute to reducing the symptoms of psychic underdevelopment; as a result, the intellectual level reaches to the lower border of the norm.

At the same time, crises at the periods of before and during the puberty may complicate an available pathology with neurotic and pathocharacterological disorders.

The outcome of borderline mental deficiency chiefly depends upon the etiological factor and presence or absence of medical-pedagogical corrective measures. Under favourable conditions it is possible to observe some acceleration in the development of psychic function development in people with delays in their psychic development.

***Etiology and pathogenesis*.** The etiology of borderline mental deficiency is various just as the etiology of oligophrenia. Along with noxious factors, producing their effect within the perinatal and early postnatal periods, sociocultural factors are important too. The pathogenesis of borderline mental deficiency is based on the dysontogenesis and chronogenic factor, with a resultant immaturity of different areas of the brain, their dysregulation and functional insufficiency.

The treatment of children with borderline mental deficiency should include drug preparations directed at improving haemodynamics and biochemical processes in the brain, as well as corrective measures of the pedagogical level. Children with different clinical forms require an individual approach and special programmes for studying. Upbringing influences and sanitation of the social sphere of a sick child are important too.

Dementia in neurodegenerative diseases.

Alzheimer's disease.

Is dementia, Alzheimer's type, one of the most common form of primary degenerative dementia in old age, which is characterized by a gradual hardly noticeable beginning in presenile and senile age, a steady progression of disorders of memory and higher cortical functions until the total collapse of the intellect and mental activity in general, as well as the characteristic complex of neuropathological features.

Senile dementia involves 5–10 % of all people older 65. With an increase of age in the presenile age groups the risk of development of senile dementia rises. Among the patients with senile dementia there are twice more females than males.

The total amount of funds needed for the care of dementia patients has increased rapidly over the last decade, which was the result of increasing the number of affected persons with retarded diseases. It was found that the annual cost for a patient suffering from dementia in Sweden is approximately 100 000 – 400 000 kroons (1 US dollar equals 8 crowns). The same figures are given in a number of studies conducted in the United States. Thus, the AD is not only a major cause of adverse health status of society, but also a significant financial problem, the value of which will increase further in the coming years.

The modern classification of Alzheimer's disease is based on the principle of age. According to the ICD 10th Revision (1992) is divided into three clinical types:

1) F00.0 AD with early onset (synonyms: type 2 Alzheimer's disease, presenile dementia Alzheimer's type) develops mainly in presenile age, accompanied by a steady progression of memory disorders, intellectual activity and higher cortical functions, and leads to the development of total dementia with severe speech disorders, praxis and optico-spatial activity (afato-apracto-agnostic dementia). The structure of dementia syndrome and the main clinical characteristics of the disease corresponds to that one wich was described for the first time by A. Alzheimer (1906) and received his name later, ie, BA itself (here in after referred to as presenile AD).

In the majority of cases of presenile AD (from 75 to 85 %), the disease begins between the ages of 45 to 65 years, but may be earlier (about 40 years) and later – 65 – the beginning (10–15 %) of cases. The average age of patients of the onset varies according to various estimates from 54 to 56 years. The mean duration of illness of 8 – 10 years; however, may also be more prolonged (more than 20 years), and during a catastrophic progress of the disease – from 2 to 4 years.

2) F00.1 Alzheimer's disease with late onset (synonyms: type 1 Alzheimer's disease, senile dementia of Alzheimer's type). The disease begins in the vast majority of cases in the senile, or (less often) the elderly age with subtle memory impairment, general intellectual decline and personal changes, in the future at a steady progression develops total dementia, amnestic type, accompanied by a general decline in higher cortical functions, which (unlike presenile AD) relatively rarely reach degree of severe focal cortical disorders. From 75 to 85 % of the cases of senile dementia of the Alzheimer type starts between 65–85 years, although early preclinical symptoms in a small portion can be detected earlier cases 60. The duration of the disease varies from 4 to 15 years or more.

3) Also highlighted: F00.2 Atypical Alzheimer's disease or dementia of a mixed type, characterized by a combination of manifestations characteristic for AD, as well as for vascular dementia.

Clinical manifestation

The course of the disease is traditionally distinguished by three main stages: mild, moderate and severe dementia. Sometimes emit 2 additional stages in the pre-clinical stage and the stage of moderate-severe (intermediate between moderate and severe).

The preclinical stage is characterized by initial signs of memory and intellectual decline (so-called questionable dementia by Berg L. et al., 1993) in the form of a permanent mild forgetfulness to incomplete events, little difficulties in determining the temporal relationship and mental preservation to operations or only a slight deterioration in social or occupational functioning at full preservation of everyday kinds of activities. Already at this stage simple praxis disorders appear, personality changes according to the type of accentuation or leveling personal characteristics, as well as reducing mental activity. In this most early stage of development of the disease patients are usually unable to hide or compensate for their existing disorders.

At the stage of "soft" dementia, memory disorders (especially on current events) are amplified and become obvious to others, patients have difficulties in chronological order, as well as the geographical orientation. There are obvious difficulties in cognitive operations, with particular disorders of abstract thinking, generalization capabilities, judgment, comparison. Patients can no longer independently perform financial transactions, maintain correspondence, travel, although still retain the ability to self-care and to a considerable extent – to independent living. Presenile AD disorders of higher cortical functions (speech, praxis, optic-spatial activities) at the stage "mild" dementia reach a clearly defined. Senile unlike presenile type of the disease will debut exclusively amnesic disorders. Recently, often combined with changes in personality according to the type of so-called trans-individual (senile) restructuring of the personality structure or (rarely) or psychotic type as a sharp, often grotesque sharpening patient personality traits. Only in extremely rare cases at the beginning of the disease, there is a clear reducing of mental activity.

More than a third of patients with early-onset at the stage of mild dementia revealed affective disorders, often in the form of chronic hypothymic affect and (or) subdepressive reactions to its own insolvency or stressful situations associated with the disease. Often subdepressive symptoms are combined with anxiety, hysteroform or hypochondriacal disorders. Delusional disorder in the form of episodic protracted delusions or damage, theft, at least – the ideas of reference, persecution or jealousy are detected in the early stages of the disease in about a quarter of patients. More than half of patients with senile type AD at the stage of "mild" dementia find episodic or more persistent little developed and unsystematic delusions, often in the form of petty nonsense particular theft, damage, petty harassment directed against people from the inner circle of patients. In contrast, patients with senile AD patients comparing to presenile type of disease are characterized by long-term preservation of the basic personality characteristics, the presence of a sense of inferiority or changes and even adequate emotional response to the disease.

On the stage of moderate dementia, amnestic syndrome in combination with impaired higher cortical functions specific to defeat the temporo-parietal brain regions, ie dysmnesia symptoms, dysphasia, dyspraxia and disgnozia is typical. At this stage, there are marked memory disturbances, concerning both the possibility of acquiring new knowledge and memory of current events and playback of past knowledge and experience, in gross violation of orientation in time, and often in the environment. Patients can no longer cope alone with any professional or public duties. Patients are available only to a simple routine work at home, their interests are very limited, need constant support and help, even in self-service. For patients with senile amnestic type of AD is characterized by disorientation, the phenomenon of "the shift of the situation in the past," ie, with morbid revival of memories of the distant past and the false recognition of others that patients take for people from your past.

At this stage in patients with presenile type of AD, there are various neurological symptoms: increased muscle tone, single seizures (abortive and generalized), Parkinson-like disorder (akinetic-hypertonic) amiostatic or dissociated neurological syndromes: stiffness without rigidity, amimia without general akinesia, isolated gait disorders, as well as various hyperkinesis, often choreo-like and myoclonic.

At the stage of severe dementia condition (depending on the type of the disease) is characterized by the total collapse of dementia with deep memory disturbances, total fixation amnesia and amnestic disorientation. Patients completely loose the idea of time and the environment and have a very meager idea of themselves. The severity of the collapse of intelligent functions such that patients almost completely losoe the ability to judgment and reasoning, verbal communication, as well as psychomotor skills. They are not capable of independent existence, and need constant care and supervision.

At that stage of severe dementia, neurological symptoms reach maximum severity. In type senile AD is presented by subcortical disorders, usually in the form of so-called senile and senile tremor gait change, which becomes mincing and shuffling. When senile AD, even at the stage of the initial state does not have the rough of neurological disorders (grasping and oral automatisms, amiostatic syndromes or hyperkinesis) which is typical for the final stage of presenile AD.

At the final stage of severe dementia (final or initial state) all mental activities are destroyed with severe neurological disorders, multiple violent motor phenomena, automatism and primitive reflexes, violent grimace of weeping and laughter, sometimes – seizures, as the development of a forced ("embryonic") posture and contracture. In patients with severe senile dementia the final stage is usually formed after the addition of a somatic pathology, most commonly pneumonia. Against this background, developing rapidly cachexia, severe degenerative disorders and fetal posture.

Relatively often against a background of symptomatic dementia (mild and severe) having psychotic disorders (the state of confusion, stage hallucinatory experiences, reduced delirious and delirious-amential syndromes), and behavioral disorders (aggression, restlessness, anxiety, violent cries, jet lag and etc.). Usually psychotic disorders develop when joining other exogenous factors – often against the background of systemic diseases, or after surgery, trauma, drug or other intoxication and even as a result of traumatic experiences or a sharp change of life stereotype.

Diagnostics

In accordance with diagnostic recommendations developed by international expert groups, including NINCDS-ADRDA (McKhan GD et al., 1984), DSM-IV (APA, 1994), CERAD (Mirra SS et al., 1994) and approved by the WHO International classification of diseases 10^{th} revision of intravital diagnosis of Alzheimer's disease based on the presence of obligate following characteristics:

The presence of dementia syndrome:

– The development of multiple cognitive deficits, which is determined by a combination of the deterioration of memory disorders (memorizing new and / or playback previously assimilated information) and the presence of symptoms of at least one of the following cognitive disturbances: aphasia (impaired speech function); apraxia (impaired ability to carry out motor activities despite undisturbed motor function); agnosia (inability to recognize or identify objects despite intact sensory perception); infringement of intellectual activities (planning, programming, abstraction, establishing cause-effect relationships);

– Reduction of social or professional adaptation of the patient as compared to its previous level due to impairment and cognitive functions;

– The course is characterized by gradual hardly noticeable beginning of a steady progression and memory impairment and other cognitive functions;

– There is no evidence of clinical paraclinical studies, which may indicate that the disorder of memory and cognitive functions caused by another disease or damage to the central nervous system (eg, cerebrovascular disease, Parkinson's disease or Pick's, Huntington's disease, subdural hematoma, hydrocephalus and etc.); systemic disease, which is known that it can cause dementia syndrome (hypothyroidism, deficiency of vitamin B_{12} or folic acid hypercalcemia, neurosyphilis, HIV infection, severe organ failure, etc.) or state of intoxication (including medical);

– Signs of these cognitive deficits should be identified outside the conscious disorder states;

– A history information and data from clinical trials exclude connection of cognitive disorders with some other mental illness (such as depression, schizophrenia, mental retardation and others.).

Treatment and prophylaxis. There are no methods of treatment capable of arresting the process of mental deficiency has been found yet. Modern pathogenetic therapy of AD provides a combination of compensatory (cholinergic or glutamatergic) and neuroprotective (neurotrophic) methods of drug exposure. It has been proven that the deficiency of the neurotransmitter acetylcholine (NA) underlies the manifestations of cognitive impairment and the subsequent formation of total dementia. In

Alzheimer's disease, 30 to 95 % of cholinergic neurons are lost, especially in the cortex and hippocampus. Currently, acetylcholinesterase inhibitors (AChE) are used to overcome cholinergic deficiency. In Alzheimer's disease, the number of glutamate receptors in the hippocampus area is significantly reduced – a key area for the development of Alzheimer's type of neurodegeneration, and the level of decline reliably correlates with the severity of dementia. The concept of glutamate-mediated excitotoxicity has been developed and experimental and neuropathological data have been obtained, confirming the involvement of this mechanism in the Alzheimer's type of neurodegeneration. Recently, second-generation AChE inhibitors have acquired the highest prevalence: rivastigmine (rivastigmine) and galantamine (galantamine) and antagonists of NMDA-glutamate receptors (memantine).

Small doses of psychoactive drugs are administered in the development of psychosis, behaviour and sleep disorders.

In cases of the appearance of psychoses, neuroleptics which do not cause severe side effects and antidepressants are used. The doses of psychoactive drugs should not exceed 1/3–1/2 of average doses used for patients at a mature age. For a more expressed senile psychopathization and senile fussiness, small doses of neuraleptices are used. Transquillizers are rarely administered owing to their unsatisfactory tolerance by people at a senile age. Sleep disorders are corrected with hypnotic drags.

Concomitant somatic diseases are treated, thereby postponing the lethal outcome. Mostly, symptomatic treatment directed at maintenance of the activity of the cardiovascular system and other vital somatic functions is given.

The patients require supervision and care. It is necessary to provide them with a diet, control regularity of their physiological discharges and cleanliness of the skin, press for a feasible motor activity and, if possible, to involve them in the simplest forms of activity. Constant control over the patients' behaviour must be exercised because they may commit dangerous acts.

Patients with senile dementia require hospitalization only if they develop some psychosis or severe disturbances in their behaviour. It should be taken into consideration that any change in the usual tenor of life, including hospitalization, may contribute to aggravation of the mental and physical state of patients with senile dementia and approach the lethal outcome.

Real measures for preventing senile dementiae are not known. Opportune effective therapy of a somatic pathology in people of the presenile age may be of some prophylactic value.

Control questions

1. Clinical features of the manifestations of anorexia nervosa, depending on the stage of the disease.

2. Basic principles of treatment of patients with anorexia nervosa.

3. List the basic directions of treatment of Alzheimer's disease.

4. List the clinical forms depending on the degree of intellectual defect.

Tests

1. Patient D, 18 years old, weight 49 kg, height 168 cm. From 7th grade patients have concerns about excessive fullness, began to pay more attention to their appearance, seemed himself overly full. From the words of the mother that her daughter is around the pillar, I realized that my mother alludes to her "overweight" figure. In order to start a weight loss restrict your diet. In connection with the painful hunger often violated their diet, secretly ate a lot, and then induce vomiting. Soon it induces vomiting daily, while experiencing "pleasant satisfaction with pleasure and ease in the body." I lost weight to 59 kg, occurred amenorrhea, but the patient is still considered herself a large and continued to restrict your diet. At the heart of the development of clinical manifestations of anorexia nervosa may be based on:

A Catatonic disorder
B. Dismorphomania disorder
C. Focal seizures in the form of abdominal pain
D. Visceral hallucinations
E. Senestopathy

2. Patient P., 26 years old, an only child, brought up as a "family idol." Since childhood, the appetite was reduced, he ate with persuasion. With 13 years began to show increased interest in their appearance. I wanted to be slim, "beautiful", to be thinner than a friend in the class. Especially not like the abdomen, thighs, hips. Start sharply restrict your diet, do exercises reinforced. There was a fear of food. When a body weight of 35 kg, height 168 cm. It is drained, skin pale, cyanotic, dry. Subcutaneous adipose tissue is absent. Mammary glands are atrophied. Amenorrhea in 10 years. In asthenia state, still considers herself a "plump", refuses to eat. Typical complications of anorexia nervosa are:

A. Cachexia
B. Uterine bleeding
C. Symptoms of hyperthyroidism
D. Symptomatic epilepsy
E. Bulimia

3. Patient., 24 years old, in order to achieve maximum sexual arousal observed the desire to dress in women's clothing, after which he admires them and masturbating. Also in the women's clothes, he can have sex with his girlfriend. View and touch women's clothing on his body further excites him. What diagnosis:

A. Homosexuality
B. Cross-dressing
B. Transsexuality
D. Ephebophylia

4. Patient C was treated in a psychiatric hospital. Body weight 39 kg, height 160 cm. Refusal to eat explains the desire to lose weight, but does not know "how drove himself to exhaustion," "do not want" is not shy about its thinness. The department immediately began to eat on their own, but requested in connection with "stomach pains" not to give her a big servings. After eating a lot of moving, running, gymnastics was engaged to "keep in shape." Mother admitted he did not want to recover more than 2 kg. After discharge, he experienced severe anxiety better. He continued to restrict your diet. The most effective method of psychotherapy in the treatment of anorexia nervosa are:

A. Rational psychotherapy
B. CBT
C. Gipnosugestivnaya
D. Narkopsihoterapiya
E. Neurolinguistic programming

5. The boy has a round head, a narrow sloping forehead, "Mongoloid" shape of the eyes, a tongue with a deep longitudinal groove, reduced pinna with adherent lobe, four finger transversed furrow on the palm, congenital heart disease, imbecility. The examination revealed trisomy on 21 pair of chromosomes. What disease is most likely to have a child?

A. Down’s syndrome

B. Elers-Downlo's syndrome
C. Phenylketonuria
D. Turner's syndrome
E. Klinfelter's syndrome

6. A girl 12 years, with developed phrase speech, but poor vocabulary. Her speech is often in the form of verbal punches. The patient is unable to fully generalize objects. Has mostly concrete creative thinking, but an elementary generalization possible. She has good mechanical memory. Heard about the sayings and proverbs, repeats them, but metaphorical meaning does not understand them. This state is characterized for:

A. Oligophrenia in st. of imbecility
B. Oligophrenia in st. of debility
C. pedagogical neglect
D. Lacunar organic dementia
E. Psychoorganic syndrome

7. A girl of 16 years, with a growth of 135 cm, a short neck with wing-skin folds, primary amenorrhea, reduced cognitive interests, poor differentiation of emotions, blurred concepts; studying in a special school, stayed twice in the second year. Install a diagnosis:

A. Oligophrenia in Turner's syndrome
B. Debility in X trisomy syndrome
C. Mental retardation due to hypothyroidism
D. Cerebral hyponanism
E. Autism in children

Tasks

1. Patient K, 19 years. From history we know that the patient was born from the second pregnancy that occur with severe toxicity. Sick since childhood differed poor appetite, always bad and not enough eating, food sometimes discarded. Sometimes overeating marked "regurgitation." She grew up an only child in the family, I was brought up as an idol of the family. She loved to be the center of attention, was sociable, mobile, capricious, demanding, and at the same time, indecisive, prone to doubts, worrying.

In 13 years, it found curvature of the spine, which required surgical treatment. After surgery, a few days had severe vomiting and constant feeling of nausea, according to the patient, due to the fact that the poor suffered anesthesia. After discharge from the hospital I felt good, but occasionally nausea was observed that during the unrest ended in vomiting. Soon parents got a new apartment in another neighborhood. Heavily suffered moving in new apartment 'all did not like irritating". Since moving sharply participation vomiting, any even minimally uncomfortable situation led to increased nausea and vomiting. Because of the constant nausea "barely went to transport." The patient, in order to prevent vomiting in the subway and the bus, began in the morning itself artificially its cause. After that, sometime felt satisfactory, quietly went to transport. At the same time, I decided that the "vomiting may be reduced when dietary restriction". I began to limit yourself to eating.

After 11 classes, she tried to go to medical school, but on the final exam received a failing grade, and took it as "the collapse of all the hopes and plans." Sharply deteriorated, a few days had uncontrollable vomiting with nausea. Then every morning with horror waited vomiting, almost did not eat anything (to reduce vomiting), thin to 45 kg with height 160 cm. There were depressive and hypochondriacal experiences. In connection with what came to be treated in a psychiatric hospital.

When a body weight of 45 kg, emaciated, skin and visible mucous membranes pale. On the skin of the back a large postoperative scar. Blood pressure 100 / 70–130 / 80 mm Hg Sinus tachycardia. The knee tendon reflexes are increased, marked resistant dermographism red, with waves – there are red spots on the face and trunk, hyperhidrosis. The mental status: Sadness, depressed, astenizirovana. More talks about his condition during the interview covered with red spots. Talking about the fear of the nausea and vomiting, swallowing saliva, gagging. In the department of minor irritants ("nasty" neighbor enough ventilated room, painful injection, and so on. P.) Gave the stereotypical reaction in the form of nausea and vomiting. For a long time one could not go beyond the hospital: there are heart palpita-

tions, tremors felt throughout the body, cramps in the legs, "gave way feet", "weakened the hands of" advancing nausea and vomiting.Determine the diagnosis of the patient; etiopathogenetical factors of the disorder in this patient?

2. Patient K., 25 years old, went to the doctor complaining of lack of sexual function. Address to the doctor dictated by the complaints of his wife at the insufficient sex. The patient no complaints. It suits his level of sexual activity. From the history of life: The patient grew clever, active in communicating the child. But always he was physically weak, lagging behind in the physical development of their peers. Secondary sexual characteristics later developed standards for 2 years. Pollutions began in 16 years and have been extremely rare. He masturbated rarely. Girls never particularly interested. Wife – the first love and first sex (in 23 years). Wife loves, believes her ideal woman. Sexual relations at the urging of his wife. During sexual act, the erection is not complete, rapid ejaculation. What are the most likely diagnosis?

3. The patient was 13 years old. Physical development corresponds to a 6-year-old child. Skull small size, the mouth is always open, from the corner of the mouth saliva flows. For days sitting in bed, stereotypically rocking back and forth. To the surrounding is not responding, can say only “moo”. He eats with the help of medical staff, untidy during urination and defecation. In the study on the Wechsler IQ = 0. Which methods specify the level of intellectual deficiency.

4. A patient of 68 years old after suffering a cerebrovascular accident began to mark memory impairment: can not remember what she had at breakfast. Does not recognize her grandchildren. In surroundings is disoriented: being at home constantly asks, "Where am I? When we will go home? ". She is also confused in dates and events. Put the diagnosis. Spend a differential diagnosis.