

Kharkiv National Medical University
Department of Psychiatry, Narcology and Medical Psychology

WORKBOOK

**MANUAL FOR INDIVIDUAL WORK
FOR MEDICAL STUDENTS
PSYCHIATRY AND NARCOLOGY
(Part 2)**

Student _____
Faculty _____
Course _____ Group _____

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Копіювання для розповсюдження в будь-якому вигляді частин або повністю можливо тільки з дозволу авторів навчального посібника.

CLASS 7.
NEUROTIC DISORDERS. CLINICAL FORMS. TREATMENT AND REHABILITATION.
POSTTRAUMATIC STRESS DISORDER. TREATMENT AND REHABILITATION.

Psychogenic diseases are a large and clinically varied group of diseases resulting from an effect of acute or long-term psychic traumas, which manifest themselves by both mental and somatoneurological disorders and, as a rule, are reversible.

Psychogenic diseases are caused by a psychic trauma, i.e. some events which affect significant aspects of existence of the human being and result in deep psychological feelings. These may be subjectively significant events, i.e. those which are pathogenic for the majority of people. Besides, the psyche may be traumatized by conventionally pathogenic events, which cause feelings in an individual because of his peculiar hierarchy of values.

Unfavorable psychogenic effects on the human being cause stress in him, i.e. a nonspecific reaction at the physiological, psychological and behavioural levels. **Stress** may exert some positive, mobilizing influence, but may result in disorganization of the organism activity. The stress, which exerts a negative influence and causes various disturbances and even diseases, is termed **distress**.

Classification of neurotic disorders

I. Acute reaction to stress:

1. Depressive reactions
2. Neurasthenic reactions
3. Hysterical reactions
4. Psychasthenic reactions
5. Paralysis of emotions

II. Neuroses:

1. Neurasthenia
2. Hysteria
3. Neurosis of obsessions
4. Neurotic anxious disorders
5. Neurotic depression

III. Somatoform disorders

IV. Neuroses in children:

1. Systemic (monosymptomatic) neuroses
2. Neuroses of fear
3. Pathological habitual actions

V. Reaction to severe stress and adjustment disorders

Neuroses are psychogenically caused reversible mental disorders manifesting themselves by emotional instability, higher mental exhaustibility, affection of general state of health and various somatoautonomic functions, which do not change self-consciousness of the personality and realization of the illness.

All neuroses are characterized by such common manifestations as:

✓ disturbances of general state of health – a feeling of inner discomfort, headache, weakness, jadedness, easy fatigability, loss of strength, bad sleep, unpleasant painful sensations in different parts of the body;

✓ emotional-volitional disorders – lack of emotional restraint, touchiness, disposition to affects, unsteady mood, disposition to depressive reactions, fears and obsessions, insufficient volitional control over emotional manifestations;

✓ disruption of other psychic functions (memory, attention, thinking, perception and consciousness);

✓ disturbances in the effector sphere (tics, annoying actions, functional paralyses, pareses, mutism, tremor);

✓ autonomic disturbances (sweating, hot flushes, lability of pulse and blood pressure, tachycardia, dyspeptic phenomena, dyspnoea).

Morbidity rate. There are no exact data about the morbidity rate of neuroses among population. Information about registered cases is available for separate regions: from 15.8 to 30.0 per 1,000 people. Neuroses make up 20-25 % of mental diseases. The number of people with neurotic disorders has significantly increased over the last decade.

Acute reaction to stress (neurotic reactions).

Neurotic reactions are acute responses to stress, the psyche being traumatized here by intimate-personal feelings. These may be a failure to satisfy some desires by the relatives, disappointment in a friend, an unfair (in the patient's opinion) remark in presence of people of his age. Such reactions are more commonly observed in adolescents. According to ICD-10, they are encoded as F43.

There are no data about the morbidity rate of neurotic reactions, because in the overwhelming majority of cases these patients do not take medical advice. The clinical forms of neurotic reactions depend upon peculiarities in the patient's personality; their development is caused by a bad psychological protection of the personality which makes it impossible to find an adequate way out of the given situation. The duration of these reactions is from a few minutes to several days. First of all, mental symptoms are reduced, while autonomic disorders last longer.

According to their clinical peculiarities, there are several forms of neurotic reactions.

Depressive reaction (F43.2) may develop 1-2 days following a psychic trauma; such a form of responding is mostly typical for a weak type of the higher nervous activity. The mood worsens, tearfulness appears, the patient's attention is focused on the psychic trauma and its consequences. Some cases develop overvalued ideas of self-condemnation and self-humiliation with resultant suicidal thoughts and even acts. Suicides may have severe consequences and necessitate resuscitation of the patients. Low spirits are accompanied by sleep disturbance, bad general state, easy fatiguability and unpleasant sensations in the heart region.

Neurasthenic reaction (F43.23) is characterized by phenomena of irritable weakness and autonomic symptoms.

Hysterical reaction (F43.25) follows psychic trauma in the artistic type of the higher nervous activity and is accompanied by wild emotions, or sometimes affective

narrowed consciousness. It is not in rare cases that such patients commit suicides in order to attract attention to themselves or achieve something, and though the motives of these suicides are blackmailing, not always can the patients in the state of affect correctly assess consequences of what has been done, thereby making rather deep cuts or taking a large dose of some medicine.

Psychasthenic reaction (F43.22) appears in individuals of the thinking type and manifests itself by anxiety, indecision, inability to cope with the pettiest problems. Any simplest act is accompanied by importunity, multiple repeated checks of the correctness of the act.

Paralysis of emotions (F43.28) develops after an effect of some psychotraumatizing factor. Understanding all the tragedy of what is going on and the danger of the given situation for their life and that of their relatives, the patients do not feel any emotions. The person becomes indifferent and apathetic; understanding and noticing everything he watches what is going on as if from aside.

Neurotic reactions do not require any special treatment. A positive effect is produced by benevolent talks with relatives and friends who sympathize with the patient and prompt a way out of the situation. Some cases require treatment with sedative vegetable drugs.

Neurasthenia (F48). This neurosis is caused by a long-term effect of unfavourable factors, the most significant of them being occupational nerve stress: a large volume of the information which should be learned under the conditions of time deficit and high demands to activity.

The morbidity rate of neurasthenia is up to 5 % in the population, more than 60 % of patients take medical advice with symptoms of this neurosis.

Clinical manifestation. Irritable weakness is the main clinical manifestation of neurasthenia. The patients would complain of fatiguability, weakness, reduced capacity for work. In the morning it is difficult to “engage” into work; by the time before lunch the symptoms of asthenia slightly reduce and the capacity for work improves a bit, but very soon fatiguability develops again, when any movement requires an incredible effort. The patients become impatient and cannot stand any waiting. They easily develop affects, after which asthenia increases still more and a feeling of being guilty appears for what was said or made in the state of affect. Many patients develop hyperaesthesia to visual, auditory and even tactile stimuli; they get irritated at water dropping, daily rate sound of a time piece, touching their skin.

Their sleep is significantly disturbed. Some patients cannot fall asleep for long periods of time, others fall asleep quickly, but in both cases the sleep is superficial with frequent awakenings and absence of the feeling of rest after the sleep. At daytime the patients feel sleepiness, but even if there is an opportunity to have rest, they cannot fall asleep. Some of the patients’ constant complaints are headaches whose variety (compression, tightening, pricking) is very unpleasant for the patients. Headaches usually become more severe after some physical and mental overstrain.

Many patients develop unpleasant sensations in different organs. For this reason they go to different medical specialists, and though the latter do not reveal any pathology it does not calm the patients. They are fixed on these sensations and think that they have

fallen ill with some severe incurable disease. Hypochondriacal symptoms are quite often accompanied by other symptoms of neurasthenia.

In the course of the illness there may be hypoaesthetic (when asthenia predominates) and hyperaesthetic (when short temper predominates) forms. The outcome of neurasthenia is favourable, most of the patients recover after the treatment.

Hysterical neurosis. Dissociative (conversion) disorder (F44). The term “hysteria” was used as early as in ancient times, when the cause of hysterical manifestations was connected with sexual disturbances. This term comes from the Greek word hystera which means “uterus”.

The morbidity rate. Isolated hysterical symptoms are observed almost in 1/3 of the population. General hospitals admit up to 15 % of patients with such disorders. Females fall ill twice oftener than males.

The clinical picture of hysterical neurosis is notable for a variety of its symptoms: mental, neurological, somatic. People with hysterical neurosis are characterized by easy suggestibility, strong and labile emotions. Hysterical disorders are peculiar for their demonstrative character, particular changeability, abrupt appearance and disappearance. Symptoms of the illness rather frequently assume the character of manipulations with the surrounding people, and after resolution of the psychotraumatizing situation they weaken or disappear at all. These disorders are allegedly protective.

In hysterical neurosis, somatic and neurological symptoms may be often connected with the contents of the psychic trauma. Thus, out of the fear to fall ill with some disease patients may develop its “symptoms”. In this connection hysteria is called a great imitator, a chameleon.

Hysterical neurosis usually develops in sensitive and ingenuous people of the artistic type with signs of psychic infantilism and emotional immaturity. The clinical picture of hysterical neurosis has the following groups of symptoms: affective, autonomic, motor, sensory.

Affective disorders manifest themselves through excessive lability of emotions, extremely unsteady mood, wild emotional reactions. The patients may loudly sob, making an impression of inconsolable grief, and merrily laugh a few minutes later.

Autonomic disorders are expressed through numerous “somatic” symptoms: pains in the heart, palpitation, faints, nausea, vomiting, abdominal pains, dyspnoea, “attacks” of asphyxia, false pregnancy, etc.

Motor disturbances in hysteria may be in the form of hyperkineses or akineses. Hyperkineses manifest themselves by tics, tremor of the head and extremities, blepharospasm, glossolabial spasm, chorea-like movements, a fit of convulsions. The hysterical fit of convulsions should be differentiated from the epileptic one.

Epileptic paroxysms	Hysterical fits
Their appearance is not caused by any external factors	They appear in a psychotraumatizing situation
The duration of the fit is limited in time	Their duration depends upon the duration of a psychotraumatizing situation
Disengagement or change of	Consciousness is clear or affectively

consciousness is observed	narrowed
The postictal period is most often characterized by the development of coma which turns into sleep	After the fit, some elements of ostentatiousness and hysterical mutism are observed
The rate of paroxysms during the illness increases	The rate of paroxysms depends upon psychotraumatizing factors
Convulsive seizures are often observed	Convulsive seizures are seldom observed, only after a psychic trauma
Epileptic changes of the personality are formed in the patients	The patients have personality peculiarities by the neurotic type
Sometimes elements of hysteriform manifestations are possible	Hysterical symptoms are leading ones in the clinical picture
There are typical changes on EEG	EEG is within the physiological norm limits
Control of paroxysmal states is achieved with help of antiepileptic drugs	Control of paroxysmal states is achieved with help of psychotherapy and tranquillizers

Hysterical hyperkineses, unlike organic ones, depend upon the patients' emotional state and are accompanied by unusual postures and autonomic symptoms (a lump in the throat); they disappear or become weaker after elimination or desactualization of psychotraumatizing effects.

Hysterical akinesiae develop by the type of mono-, hemi- and paraplegiae. They are characterized by disturbances in the gait: "astasia-abasia", when the patients are not able to stand and go without any organic disorders. Some patients complain of weakness in their arms and legs, which appears in cases of excitement, when the legs become "wadded", "heavy" and these people "stumble at every step".

Typical for hysterical motor disorders is lack of correspondence between them and the topographic location of nerve trunks or localization of a focus in the CNS, absence of pathological reflexes, changes in tendon ones.

Aphoniae are seldom observed in recent time, more often the patients complain of stammering, difficulties in pronouncing some words.

Sensory disorders are represented by a disturbance of sensitivity and painful sensations in different organs and parts of the body. Disturbances of skin sensitivity have various configuration and location, more frequently they are localized in the region of the extremities in the form of gloves, stockings, socks.

It should be noticed that owing to a wide popularization of medical knowledge, some pathomorphism of hysterical manifestations has taken place. Thus, instead of an absolute loss of sensitivity the patients complain of dumbness in their extremities, a sensation of creeping, hot flushes to the extremities. In case of hysterical neurosis the patients would talk about their feelings with some inspiration, emphasize their exceptional character: the pains are "terrible", "intolerable" and cannot be compared to anything. At the same time, they do not feel these disturbances as a burden, as if being indifferent to them.

The foreign literature terms some hysterical disorders dissociative. Dissociation is such a state when for a certain period of time some mental complexes get autonomy and control mental processes breaking any contact with the psychic life integrity. These are transitory disruptions in the integration of psychic functions. Hysterical disorders of the dissociative type include amnesiae (F44.0), fugue (F44.1), stupor (F44.2), trances and obsessional states (F44.3), and hysterical psychoses which will be described in chapter “Situational psychoses”.

Clinically, the term “conversion” (from Latin conversion, i.e. “transformation”, “substitution”) means a particular pathological mechanism which causes transformation of psychological conflicts into somatoneurological symptoms. These are motor, sensory and autonomic symptoms of hysterical neurosis.

Hysterical psychogenic reactions may be short-term and disappear without any treatment. But a prolonged (during several years) fixation of morbid symptoms is also possible. In some cases there is a wavy course: after attenuation of hysterical disorders a tendency to their appearance in psychologically unfavourable situations remains. In a protracted course of hysterical disorders, the symptoms of conversion are fixed, characterological changes are aggravated and there is addition of steady asthenia, hypochondriacal and dysthymiac disorders. Underestimation of the clinical importance of hysteria symptoms interpreted as a result of autosuggestion or aggravation and simulation may cause improper diagnosis and administration of inadequate therapy.

Unlike conversion hysterical symptoms, in cases of malingering the disease-imitating signs are under the conscious control and can be discontinued by the malingerer at any moment. In hysteria, the somatoneurological disorders develop according to their own clinical regulations irrespective of the patient’s wishes.

Obsessive-compulsive neurosis – is a common term for neuroses which manifest themselves through morbid fears (phobia), annoying thoughts (obsessions), annoying actions, anxiety, recollections.

Different manifestations of obsessive-compulsive neurosis are encoded in ICD-10 with different signs: phobic and anxious disorders – F40, agoraphobia – F40.0 (without panic disorders – F40.00, with panic disorders – F40.01), social phobia – F40.1, specific (isolated) phobia – F40.2, other anxious disorders – F41, obsessive-compulsive disorders – F42.

In the Ukrainian psychiatry these states are traditionally described as a separate form of neurosis because they are joined by one common etiological factor (psychic trauma), develop in people with similar personality peculiarities, symptoms of the illness seldom occur in an isolated form and are accompanied by autonomic disturbances typical for all the neuroses. Separate manifestations of this neurosis are rather common for the patients treated by general practitioners. Thus, the morbidity rate of obsessive-compulsive disorders is up to 10-20 % in the general medical network, they occur in 1.5-2 % of cases in the population, while in the practice of psychiatrists they make up to 1 % of all the patients.

Manifestation of the symptoms of obsessive-compulsive neurosis is preceded by a psychic trauma which determines the contents of the leading disorder. Thus, a female patient who leaving the underground found herself in a crowd of people, felt unpleasant

sensations in her heart and the fear that it might stop, and later she developed agoraphobia.

The initial stage of the illness is most commonly characterized by a panic disorder which determines the debut of the disease. It may be represented by abruptly appearing and rapidly increasing autonomic disturbances (sensations of asphyxia, difficulty in breathing, dizziness, palpitation, sweating) accompanied by the fear of losing consciousness, madness, death. This state may last up to 20-30 minutes. Panic attacks are followed by some annoying fear (phobia), the most frequent of them being agoraphobiae, social phobiae, hypochondriacal phobiae.

Agoraphobia (F 40.0) is the fear of open spaces, transport and crowd. This disorder is provoked by an underground journey, being aboard an airplane, in a shop, crowd, lift, going to the theatre, cinema, etc. The fear is accompanied by autonomic symptoms (dryness in the mouth, tachycardia, profuse sweating, tremor), thoracoabdominal symptoms (dyspnoea, asphyxia, chest pains, nausea, discomfort in the gastrointestinal tract), mental symptoms (derealization, depersonalization, fear to lose self-control). The patients try to avoid any situations when they may find themselves without being accompanied by a relative in places where it is difficult for them to go out unaided. Some patients would not leave their home being afraid of attacks of the fear; it affects their life stereotype and social adaptation, sometimes they refuse any activity outside their home.

Social phobia (F40.1) are the fear to find oneself in the centre of attention, the appearance of confusion and shame in presence of other people. Social phobiae usually manifest themselves in adolescents and young people; they are provoked by particular situations in school, such as answering at the blackboard, an examination, a necessity to appear on the stage, as well as to contact with teachers, masters and representatives of the opposite sex. At the same time, an intercourse with the relatives and friends does not produce any fear. The patients are afraid of the situations when they have to make some action in the presence of strangers and its negative appraisal is supposed. They try to avoid evening parties, are afraid to eat, write, use public conveniences in the presence of strangers. The patients are afraid that their associates will notice this fear and mock at them. The patients' attitude to the fear is always critical, but they cannot get rid of it and as a result their self-estimation is understated. Social phobiae are often accompanied by other mental disorders: anxiety, other phobiae, affective pathology, alcoholism, disturbances in food behaviour.

There are two main groups of social phobiae: isolated and generalized. Isolated social phobiae are the fear not to make some habitual actions in public and avoidance of concrete situations. No difficulties in personal contacts outside these situations appear. One of the forms of an isolated social phobia is the fear to flush, to demonstrate awkwardness, confusion in personal contacts (ereuthophobia). Being afraid that their associates will notice it, the patients are shy in public and often embarrassed. In generalized social phobiae, the fear is accompanied by appearance of ideas of littleness and reference. Most frequently, these disorders develop in the syndrome of scoptophobia (the dread to look absurd, to display one's own defect in public). The patients feel shame which is not caused by any real facts but affects their behaviour (avoidance of contacts with people).

Hypochondriacal phobiae (nosophobia) are the morbid fear of some bad disease. Cardio-, cancro-, syphilo-, AIDS- and insult phobiae are the most common. These patients often visit different doctors demanding medical examination. The patients' efforts are aimed at elimination of the conditions which cause appearance of the fear and panic attacks. They independently work out a complex of protective and adaptive measures: they move to an ecologically clean region, change their job. Certain hypochondriacal lines are formed: limited contacts, a sparing way of life, non-participation in some activities.

Specific (isolated) phobiae (F 40.2) are limited by a strict definite situation: being near some animal, fears of height, thunderstorm, nausea, dental manipulations. Any contact with an object of the fear causes anxiety, therefore typical for these patients is to avoid phobic situations or objects.

Besides morbid fears, obsessive-compulsive neurosis is characterized by obsessions (annoying thoughts) and impulses (annoying actions).

Annoying thoughts appear in spite of the patient, are perceived by him as alien and absurd, he tries to resist them. Obsessions are more common in the form of doubts, contrast drives, the morbid fear of becoming dirty. In annoying doubts, the patients are haunted by thoughts about correctness of their decisions and actions. Such patients would constantly try to remember if they have locked a door, turned off gas, electricity and water supplies. These doubts haunt the patient when he fulfills his job duties: whether he has correctly arranged some papers, carried out his chief's order, put down a telephone number, etc. This diffidence makes them waste much time for repeated checks. Morbid sluggishness is a bad obstacle in any everyday activity, requiring hours for the simplest acts: dressing, meals, shaving. Commonly observed are morbid counting, repetitions, pedantry, an increased carefulness, development of different rituals in counting, "good" and "bad" numbers. Some concrete contrast drives are extremely unpleasant, when the patients develop an irresistible desire to make some act or pronounce a phrase which contradicts to their own directions and generally accepted ethics. For instance, to say obscene words, injure one's own relatives and children. These thoughts cause the fear to lose self-control and, possibly, make some actions dangerous for others and the patient himself. The patients would ask their relatives to hide knives, forks, axes. Annoying thoughts are accompanied by the feeling of estrangement and bright affective satiation, which are alien to the contents of the thoughts and combined with annoying drives and actions. Rather often the patients reveal annoying thoughts and fear of becoming dirty (mysophobia). They are afraid to make themselves dirty with dust, urine, soil, faeces, as well as fear penetration of toxic substances or invasion of microorganisms into their body. In order to avoid it, the patients would carefully follow rules of personal hygiene: they often wash their hands, change clothes, every day do their flat, carefully treat foodstuffs. The patients would resort to various ways of protection, some of them seldom leave the flat, do not receive even their relatives being afraid of any contact with dirt or toxic substances. Morbid doubts are accompanied by frequent checks of their own actions.

Morbid actions almost never occur in an isolated state. Sometimes they are in the form of isolated monosymptomatic motor disturbances, oftener tics. The patients would shake their head, move their arms, blink.

Depending upon structural peculiarities of the obsessive syndrome, the following categories are isolated: F42.0 – annoying thoughts, mental chewing; F42.1 – mostly compulsive actions, obsessive rituals; F42.2– mixed annoying thoughts and actions. В МКБ-10 выделяются в отдельную группу «другие тревожные расстройства» F41.

The course of obsessive-compulsive neurosis is chronic. Recovery is rare. The cases of monomorphic manifestations may be characterized by long-term stabilization, with a gradual reduction of psychopathological symptoms and social adaptation. The most resistant to therapy are phobias of becoming dirty or infected, sharp objects, contrast obsessions, numerous rituals. Such patients often have relapses of morbid manifestations and are at the risk of formation of residual disorders.

ICD-10 isolates “other anxious disorders”, F41, as a separate group.

Panic disorder (episodic paroxysmal anxiety, F41.0). The attacks of panic pass like in agoraphobia. The patients rapidly develop the fear of expectation of repeated attacks which they try to conceal. These attacks often appear spontaneously without any connection with the situations endangering or threatening the patients' life. The anxiety develops abruptly, achieves its maximum within a few minutes and is accompanied by autonomic disturbances. If there are 4 attacks a month, this is a moderate panic disorder (F41.00); if there are up to 4 attacks a week, this is a severe panic disorder (F41.01).

Generalized anxious disorder (F41.1) is often accompanied by other neurotic states. It is observed in 2-5 % of the population, twice more frequently in females than in males. Clinically, the disorder manifests itself by some steady anxiety, often having no contents, and is accompanied by the feeling of internal tension and autonomic symptoms whose intensity is less than in the panic disorder. The patients feel some internal trembling, they are timid and foresee the worst outcome in all affairs. Such persons are impatient, short-tempered and fussy. Usually they do not regard their morbid symptoms as psychic, therefore seldom visit psychiatrists, most of them seek help of internists.

Mixed anxious and depressive disorder (F41.2) is the state where expression of the depressive and anxious components is not sufficient and none of them predominates over the other one. These disorders are accompanied by autonomic disturbances and develop in psychogenic situations.

Neurotic depressions. Neurotic depression was first described as a separate nosological form in the beginning of the 20th century. In ICD-10 these disorders are classified as a prolonged depressive reaction manifesting itself with mild neurotic depressive disturbances caused by some protracted stress situation (F43.21).

Neurotic depression develops more frequently in people with rigidity and not inclined to compromises, who try not to manifest their emotions outwardly, but suffer their troubles “inside”. This neurosis is usually caused by a long-lasting, unsolved unpleasant situation, e.g. a disease of the child, living apart from the relatives, absence of any ability to share one's own feelings with other people. The patients would try to suppress negative emotions in themselves and not to demonstrate them to their associates.

The onset of the illness is characterized by appearance of autonomic-dystonic symptoms (sleep disturbances, headache, pains in the heart region), a few weeks later followed by asthenia with blues and anxiousness. The patients say that they have lost the joy of life, but at the same time they do not assess their future as hopeless, they make

plans for future as if not taking into account their unsolved psychotraumatizing situation. It is not in rare cases that the patients try to alleviate their sole pain with a higher activity when fulfilling their professional and home duties, despite weakness and fatigability. Some patients become tearful on any occasion. A long course of depressive neurosis develops garrulity, which was not peculiar to such patients before, and they begin to “unburden their heart” even to people whom they hardly know, telling them about their feelings and troubles.

One of the peculiarities of this neurosis is the fact that psychotraumatizing situations usually do not affect the patients’ feelings; as a rule, they do not attribute their state to it. Like in other neuroses, the clinical picture of neurotic depression is characterized by a significant expressiveness of somatoautonomic disturbances: fluctuations in blood pressure, dysfunctions of the gastrointestinal tract, sleep disturbances in the form of difficult falling asleep and wakening during early morning hours with a feeling of anxiety, palpitation. The patients often visit therapists, who either treat them symptomatically or diagnose some somatic disease. It should be noticed that despite a lot of somatic complaints in the patients, there is no hypochondriacal fixation on them. Neurotic depressions have a wavy course and often are a stage in the neurotic development of the personality.

Somatoform disorders. Among clinical manifestations in patients with neuroses, who take advice of internists, somatized symptoms prevail. The opportune diagnosis of mental disorders with “somatic” masks is of great importance because some 20 % of all the health protection means in the general somatic practice are spent for treating cases of somatoform disorders. But only 19 % of the needy patients are referred to consult a psychiatrist or psychotherapist, an average delay with such a referral being about 8-9 years.

Cases of somatoform disorders make up to 25 % in the whole number of patients of the general somatic practice in all the countries, but there are no exact data about the morbidity rate in the population. The somatized disorder is markedly more common for females, whose morbidity is 1-2 %. The hypochondriacal disorder among patients of the general somatic practice makes up from 3 to 14 %, no sex-specific differences and family cases being observed. The chronic somatoform painful disorder is also more common for females versus males with the ratio of 2:1.

Etiology and pathogenesis. The heading of the “somatoform disorder” actually includes neurotic somatized borderline mental disorders whose etiology and pathogenesis have been analysed from the viewpoint of the Ukrainian psychiatry. Thus, a leading part in the etiopathogenesis of somatoform disorders, like in neuroses, is played by psychogenic factors (intrapersonal and microsocial conflicts), but patients with somatoform disorders, as a rule, are reluctant to discuss their psychological problems. Side by side with this fact such patients are supposed to have some neuropsychological basis, genetic predisposition. According to some authors, “somatization” of mental disorders is facilitated by alexithymia (a person’s inability to express his emotional feelings, difficulties in the verbal and symbolic expression of emotions). Features of alexithymia are also typical for patients suffering from “classical” psychosomatic diseases. Alexithymia is characterized by present difficulties in the recognition and description of one’s own feelings, a reduced capacity for symbolizing and dreaming,

more concentration on outward events than innermost feelings.

Classification of clinical manifestations. Mental diseases mostly manifesting themselves by various “pseudosomatic” disorders were traditionally described in the Ukrainian psychiatry within the frameworks of neurasthenia, hysteria and hypochondria, somatoautonomic symptoms being undoubtedly considered as one of the compulsory signs of any neurotic disorders.

Recently, the structure of nonpsychotic mental diseases has been characterized by a sharp rise in the share of disorders with prevalence of somatic complaints, mostly with a somatic expression of mental disorders. Introduction of the diagnostic category of “somatoform disorders” in ICD-10 corresponds to these tendencies.

Somatoform disorders in ICD-10 are described as a group of psychopathological disturbances whose main sign consists in the relapsing development of physical symptoms along with constant demands for medical examinations in spite of confirmed negative results and doctors’ assertions about absence of any physical basis for the symptoms.

Somatoform disorders include the following subgroups:

- ✓ somatized disorder – F45.0;
- ✓ undifferentiated somatoform disorder – F45.1;
- ✓ hypochondriacal disorder – F45.2;
- ✓ somatoform autonomic dysfunction – F45.3;
- ✓ chronic somatoform painful disorder – F45.4.

Somatized disorder. Its clinical picture consists of numerous stable and modifying somatic symptoms, which subjectively exist at least two years, but with absence of any somatic diseases which could explain these symptoms. The symptoms may relate to any part of the body or system, most often they are gastrointestinal (pain, nausea, belching, vomiting, diarrhoea, regurgitation, meteorism), cutaneous (itching, burning, tenderness, numbness, pricking), cardiovascular (pains, dyspnoea), urogenital (dysuria, pains in the genital organs, discharges). The patients’ attention is always fixed on these symptoms and they would take medical advice. A frequent comorbidity with anxiety, depression and abuse of psychoactive drugs is observed.

Hypochondriacal disorder. This manifests itself by fixed ideas (not delusions) about presence of one or several more severe somatic diseases, therewith normal routine sensations being interpreted as abnormal and morbid. The patients would constantly make somatic complaints, their attention being usually focused on the pain in either one or two organs or systems of the body. The patient may name a supposed somatic disease, this opinion may change from one disease to another. As a rule, the above ideas are preserved despite the fact that no somatic explanation adequate to the present complaints has been revealed. Unlike cases of the somatized disorder, for these patients the disease itself and its consequences are more important than separate symptoms, and they take medical advice mostly with the purpose of diagnosis.

Somatoform autonomic dysfunction. The patient’s complaints are constantly related to one of the systems which is controlled by autonomic regulation (cardiovascular, respiratory or digestive). The symptoms do not point out any physical disturbance of the organ or system involved, but they either reflect objective signs of autonomic excitement (palpitation, dyspnoea, hiccough, etc.) or are subjective and

nonspecific (transient pains, burning, heaviness, bursting open, etc.). Depending upon the organ and system, which are regarded by the patient as the source of his symptoms, the following separate disorders in this group are isolated and correspondingly encoded with the fifth sign:

✓ the heart and cardiovascular system (F45.30): cardiac neurosis, Da Costa's syndrome, neurocirculatory dystonia;

✓ the upper portion of the gastrointestinal tract (F45.31): gastric neurosis, psychogenic aerophobia, hiccough, dyspepsia, pylorospasm;

✓ the lower portion of the gastrointestinal tract (F45.32): psychogenic meteorism, irritable intestine syndrome, gas diarrhoea syndrome;

✓ the respiratory system (F45.33): psychogenic forms of cough and dyspnoea;

✓ the urogenital system (F45.34): psychogenic dysuria, a higher urinary frequency.

Chronic somatoform painful disorder. The patients complain of a constant severe pain which cannot be completely explained by some physiological process or somatic disorder. It develops against a background of a psychoemotional conflict, and there is a significant secondary advantage of the symptom: greater care and support from the part of the patient's relatives and doctors. Pains of the psychogenic origin in other mental disorders (e.g., in depression) and those which develop according to known pathophysiological mechanisms (a pain of muscle tension, migraine) are excluded. The onset of the somatoform disorder is oftener observed at a young age. The chronic somatoform painful disorder more frequently begins at the age over 45. The course of somatoform disorders is, as a rule, chronic and fluctuating.

The treatment is started only after an absolute exclusion of an organic cause of the suffering. All the stages of treating the somatoform disorder require a thorough dynamic control of the somatic state, because a probability of developing somatic diseases in patients with somatoform disorders is the same as in the population. About 2/3 of the cases with somatoform disorders can be given treatment in the general somatic network (as outpatients of a local polyclinic or inpatients of multi-type hospitals). Psychoactive drugs in these cases are administered by a general practitioner with a consultative participation of a psychiatrist. As a rule, each third case with somatoform disorders requires specialized psychiatric aid (a psychotherapist's room, a psychoneurological dispensary, a hospital for neuroses, a sanatory department of a mental hospital). The programme of treatment should be individual with an optimum combination of psychopharmacotherapy, psychotherapy and social support. The therapy of somatoform disorders always uses psychoactive drugs of different types (tranquillizers, antidepressants, neuroleptics, carbamazepine), as well as somatotropic drug preparations (B adrenoblockers, calcium channel blockers, hypotensive drugs). Tranquillizers are widely employed both for monotherapy and in combination with other psychoactive means (short-term courses due to a risk of developing dependency). For the therapy of chronic pain syndromes, antidepressants are indicated, as they produce both the antidepressive and primary analgetic effects. Serotonergic drugs are preferable owing to their more favourable type of side effects (Citalopram, Sertraline, Paroxetine, Lerivon).

Psychotherapy is always indicated for patients with all clinical forms of somatoform disorders. Depending upon the peculiarities in the patient's personality,

acuteness of the symptoms and presence of the actual psychotraumatizing situation, the forms and methods of psychotherapy are chosen: hypnosuggestive, psychodynamic, family, cognitive or behaviour.

Neuroses in children.

Systemic (monosymptomatic) neuroses are usually observed in children and are caused by functional weakness of some somatoautonomic system as a result of its immaturity or affection. They appear by the mechanism of conditioned reflexes. Neuroses in children are a disease of the forming personality which involves its significant aspects, the system of its relations. More commonly, their onset is not acute but during some more or less prolonged period of time. Such systemic neuroses include: stammering, enuresis, tics, regurgitations in infants, anorexia, encopresis, neurotic habitual vomiting, neurotic cough. One of the peculiarities of childhood neuroses is the fact that they are seldom triggered by an acute psychic trauma. More common are long-term unfavourable external effects, which not always are regarded by adults as negative. For instance, if the child is cared by other people rather than by his mother. Little children cannot rationally assess the situation, but emotionally respond to it. In the young children's age there may be a disturbance of nutrition (F98.2), expressed by anorexia or periodic belching of food followed by its chewing and swallowing. Such disturbances are common for the period of the child's passing on to independent eating, when the meal is eaten in a sitting position (new for the child), with help of unknown covers (plates, spoons, cups). If then the mother (or anybody else, who feeds the child) displays impatience, punishes the child, the latter develops a negative conditioned reflex to the process of feeding. Besides, refusal to eat may be caused by a food burn, forced feeding. Children refuse either any food, or selectively. The child's feeding is accompanied by capriciousness, depression, tearfulness, sometimes vomiting.

Features ages crises manifested in the clinical picture of the children's neuroses.

In early childhood dominated by autonomic symptoms (fearfulness, tearfulness, sleep disturbances, gastrointestinal dysfunction, the children are afraid of new toys, new people, etc.). The first ages crises (2 - 4 years old) characterised by disturbance of behavior in the form of passive protest reactions (enuresis, faecal incontinence, constipation, mutism) or active (aggression, anger). By the 2nd ages crises (6 - 8 years) neurotic manifestations are getting more variable, in this age systemic neuroses manifest such as enuresis, stuttering, tics, fear of attending school, disobedience, inclination to fight.

In pubertal age reactions of protest are expressed in the leave the home, school without permission. In pubertal age symptoms of autonomic dysfunction are less dominated. Hypochondriacal condition, dysmorphophobia, anorexia nervosa and bulimia, various forms of imitation behavior (imitation of adults) are developed in most of cases.

Young children sometimes develop neurotic habitual vomiting; it is usually connected with anorexia and refusal to swallow any thick and solid food. This is a psychogenic reaction to some unpleasant feeling in the process of eating.

Eating of inedible stuffs (pica) in childhood (F.98) develops at the age of 1-6 years, often in children with a severe degree of oligophrenia. Mothers of such children do not care for them, they are emotionally cold and immature. More frequently, the children

would eat pieces of plaster, rags, hair, stones, paper, sand, clay, plants with possible severe complications (intoxications, helminthic invasion, ileus).

Neurotic enuresis (F98.0) appears after an acute or protracted psychic trauma in 7 % of boys and 3 % of girls at the age of 4-5 years. Enuresis is more common at night, accompanied by sleep disturbances, emotional lability and tearfulness, and depends upon the conditions in which the child is. In a long-term course of neurosis the child's suffering of his defect is morbid, he develops fear and anxious expectation of the night with a resultant difficulty in falling asleep and interrupted sleep.

Neurotic encopresis is a voluntary or involuntary secretion of faeces with a psychogenic cause (such as a long-term conflict situation in the family, extremely strict upbringing, appearance of the second child in the family). The children do not experience any disposition to defecation, and learn about secretion of faeces by smell or revealing it on their linen. They suffer morbidly, are ashamed of their parents and other children, hide the spoiled linen from the parents, become tearful, short-tempered, and feel depression.

Neurotic tics (F95) are more frequently observed in children of the school age (7-11 years). They manifest themselves with sudden, quick and repeated stereotyped movements: winking, twitches of the shoulder or head, movements of the facial muscles, tongue, neck and mandible, coughing or (more seldom) movements of the extremities and trunk. At first, tics develop in stress situation, and later may be fixed.

Neurotic stammering (F98.5) is a disturbance of the rhythm, tempo and fluency of the speech caused by a convulsive excitability of the speech apparatus muscles. It is accompanied by disorders in speech respiration and communicative function of the speech. Its rate is 1.5-5 %, most frequently it develops at the age of 2-4 years. Stammering in young children results from either some fright or parting with their parents. The disorder develops gradually, and episodes of stammering alternate with periods of normal speech. In the elementary school forms, stammering becomes constant. It does not manifest itself in some children when they sing, recite, address animals or inanimate objects. It is not in rare cases that in the process of talking such children make auxiliary movements in the muscles of their face, neck, extremities (so-called speech "tricks"). In adolescents, stammering usually increases during talks with strangers, a speech before the class, a telephone conversation. The outcome is favourable with a spontaneous recovery in up to 80 % of cases. An unfavourable course results in the formation of logoneurosis.

Elective mutism (F94.0) is the rarest disturbance of childhood, girls prevailing among the patients. It develops after either acute or (more frequently) chronic psychic traumas. The parents of these children are notable for various personality peculiarities and often express their discontent with silence. Such children would not talk at school or in street, but use speech at home in contacts with their relatives. The disorder appears more often in the beginning of education, at school, and is accompanied by a higher shyness, timidity before strangers. Sometimes mutism manifests itself only at some lessons, often after tactless remarks of the teacher concerning the child accompanied by laughter of the whole class. The disorder lasts a few months, sometimes it can be fixed and persist for several years.

Pathologically habitual movements (F98.8). These are habitual fixed movements in younger children: sucking of the fingers and tongue (cheilomania), biting of nails

(onychophagia). The most typical for younger pupils and increasing in excitement are such things as a drive to pull out hairs on the head, eyebrows and eyelashes (trichotillomania), rhythmical voluntary swings with the head and body, observed in little children before falling asleep (jactation). Pathologically habitual actions are observed in cases of mental stress in anxious and excitable children as conditional reflex devices to relieve their anxiety.

Anxiety neurosis. Patients develop overvalued dreads, whose contents depend on the child's age and a concrete psychotraumatizing situation. In children at the age of 3-6 years, these are dreads of animals, characters of fairy tales and films, darkness, various images used by adults for frightening (witches, ogres and "scarecrows" from folk tales, etc.). Younger pupils develop some dread of the school, when the teacher unfairly scolded or punished the child. Such children would leave school, walk in streets. They would complain of fatigue, headaches and nausea. Being afraid of punishment, some children run away from their home and are on the tramp. At the age of 6-8 years there may be dreads of darkness, loneliness, separation from relatives. Dreads in adolescents are connected with apprehension for their own life, a possibility of death.

Peculiarities of classical neuroses in children

Depressive neurosis at the preschool age manifests itself by autonomic disturbances, anxiety, fear, disturbances of behaviour, sleep and appetite, loss of body weight. Separation from parents and loss of parents are the psychotraumatizing factors of this age. At the young and middle school age, a psychotraumatizing effect is produced by poor progress in studies which is superfluously condemned by the parents. Such children develop listlessness, fatigue, shortness of temper, and melancholia at an older age. The duration of depressive neurosis in children is short, some cases have a neurotic development of the personality.

Neurasthenia (asthenic neurosis) of childhood is characterized by weakness, shortness of temper, autonomic and motor disturbances (restlessness, motor disinhibition, inability to preserve the same position for a long period of time). In some cases autonomic disturbances (nausea, vomiting, anorexia, sweating, hot flushes, lability of pulse and blood pressure, tachycardia, dyspeptic phenomena, dyspnoea) are dominated in clinical picture of neurasthenia in children.

Hysterical neurosis in children manifests itself by sensomotor and autonomic disturbances: retention of urine and speech, sleep disturbances, palpitation, faints, dizziness, dyspnoea. Disturbances of sensations are not common, sometimes the child is unable to stand and walk, but can move legs in the recumbent position. Prohibitions or punishments at the young age result in attacks with motor excitement: the children would fall down on the floor, cry, jerk their legs.

Obsessive-compulsive neurosis of childhood usually develops in two variants: phobic and obsessive. The latter is characterized by various annoying actions: tics, twitchings with their critical assessment. Pupils develop motor rituals as a protective reaction in dreads and apprehensions, e.g. multiple washing of their hands in the dread of catching some infection. Sometimes the rituals are of a forced character. In order to prevent an anticipated danger the patient commits various acts. The phobic variant of neurosis in pupils manifests itself by the dread of spoiling, sharp objects, anxiety for the parents' health. Older children develop the dread of falling ill with some disease:

cancerophobia, cardiophobia, etc. Obsessive-compulsive neurosis arise gradually more often in spleeny, restless children after some time after psychic trauma.

Prognosis. The course of neuroses, which are functional psychogenic diseases, is usually favourable. The effect of the therapy of neurotic disorders is high, it is possible to achieve a significant improvement and actual recovery in 60-80 % of the cases. In anxious-phobic disorders, some half of the patients reveal relapses of the illness within the first three years following the treatment. A more favourable outcome is often observed in patients at the age of 30-40 years, as well as in females and married patients. Some cases demonstrate the neurotic development of the personality. An insufficient level of the personality maturation, some somatic burden, a long-term unsolved psychotraumatizing situation and accentuation of the character are risk factors in this case. Appearance of polymorphism of neurotic disorders significantly hampers therapy and rehabilitation of the patients. This polymorphism in an abnormal personality is explained by its response to the state of one's own health and insolvency rather than only to the psychic trauma and its consequences.

The treatment of patients with neurotic disorders. The treatment of patients with neurotic disorders should be combined: psychotherapy, general health improving therapy, use of psychoactive drugs, physiotherapy, remedial gymnastics. The part of each method in the therapy of different manifestations will be unequal, but in order to achieve success and prevent a protracted course it is necessary to use all the components. The overwhelming majority of the cases are treated as outpatients at psychoneurological dispensaries, rooms for neuroses, psychotherapeutic and psychohygienic rooms of polyclinics in the general medical network. Outpatient aid turns out to be effective in mild neurotic disorders: subclinical panic attacks, monosymptomatic obsessions, transitory hysterical, asthenoautonomic, agryptic disturbances. But some cases, i.e. patients with acute anxious phobias (manifestative panic attacks, generalized anxiety, panphobias, hysterophobic and dissociative states) require inpatient treatment which is given at specialized departments for patients with neuroses.

The psychogenic character of the abnormality necessitates psychotherapy for all the patients with neurotic disorders which is differentially applied depending upon the symptoms and directions of the patient. Both group and individual methods of psychotherapy are used. If the clinical picture is characterized by prevalence of phobic disorders, the effect will be achieved by supportive therapy directed at improving the psychological state of the patient. In order to remove phobias, the patient is taught to resist the fear-arousing object, using behaviour psychotherapy, different kinds of relaxation, including hypnopsychotherapy.

Psychopharmacotherapy is conducted with regard for the character of morbid symptoms, and though drug preparations of many psychopharmacological classes (tranquillizers, antidepressants, neuroleptics, nootropics) are used for treating neurotic disorders, the most frequent of them are tranquillizers.

The therapy of obsessive-compulsive disorders is first of all conducted with serotonergic antidepressants, the first place among them belonging to tricyclic derivatives (Anafranil); together with them selective inhibitors of serotonin uptake are widely used: fluoxetine (Prozac), sertraline (Zoloft), fluvoxamine (Fevarin). The latter is the most effective for panic attacks, Zoloft for contrast obsessions, and Aurorix (selective

inhibitor of MAO uptake) for social phobias.

Tranquillizers, especially benzodiazepine derivatives, produce their effect against anxiety and obsession, have a wide spectrum of anxiolytic activity and low death rate in overdoses.

Benzodiazepines are used for anxious-phobic, obsessive-compulsive (acute and long-term) states in combination with somatoautonomic disturbances. Panic attacks are controlled with alprazolam (Xanax) and clonazepam (Rivotril), as well as intravenous drop-by-drop administration of diazepam (Valeum, Seduxen, Sibazon), chlordiazepine (Librium, Helenium). Taking into account a possibility of developing signs of dependence, benzodiazepine derivatives are administered in the form of short-term courses.

Neuroleptics are seldom used for treating neurotic states. In episodic short-term hysterical reactions it is recommended to prescribe short courses of tranquillizers at small doses. Protracted hysterophobic states are controlled by a combination of tranquillizers with neuroleptics (Neuleptil, eglonil, chlorprothixene). In the outpatient treatment of neurasthenia it is necessary to administer so-called "daytime" tranquillizers whose sedative and myorelaxing effects are insignificantly expressed: meprobamate, Atarax, Grandaxine, rhudotel, hydazepam. If the clinical picture of neurasthenia is characterized by prevalence of asthenic symptoms, tranquillizers are to be combined with nootrops (piracetam, aminalon) and stimulants (sidnocarb, meridin) at small doses.

Persistent sleep disturbances require administration of drugs with a hypnotic effect. These are benzodiazepine derivatives (triazolam – chalcion, Midazolam – Dormicum, flunitrazepam – Rohipnol, flurazepam – dalmadorm), cyclopyrrolone derivatives (zopiclon – Imovane), imidazopyridine derivatives (zolpidem – Stilnox, ivadal).

Antidepressants are the most effective for neurotic depression.

Medical psychiatric examination of patients with psychogenic disorders

The medical labour examination. In the acute period of neurosis when active therapy need, patients are recognized as temporarily incapable with release from work for the period up to 4 weeks. The protracted obsessive-hypochondriacal condition sometimes lead to temporary disability of patients. Disability should not be determined in patients with hysterical conversion syndrome, since it can lead to the formation of patient's utilitarian installations to hindering recovery from disability.

Forensic psychiatric medical examination. Patients with neurotic disorders are considered legally responsible and declared sane. They have capacity of correctly control one's own actions and be aware of them.

Medical military psychiatric examination. Patients with severe neurotic disorders are determined as unfit to military service. Patients with moderately severe, prolonged or recurrent neurotic disorders are determined as unfit to military service at peacetime and partially fitness in combat. Patients with short-term disorders respond well to treatment be granted sick leave or deferment for treatment, after which are recognized as fit for military service.

Posttraumatic stress disorder (PTSD)

These are various psychic and somatoautonomic disturbances developing after some extreme psychic traumas. PTSD appears not immediately after a psychic trauma, but in a few weeks, this delay being not more than 6 months. An acute psychogenic

disorder in such patients may be insignificant or even absent. Various uncontrolled and controlled events endangering the patient's life are etiological factors of PTSD. Usually these are great calamities: natural (earthquakes, hurricanes, floods, etc.), caused by man (fires, explosions, industrial accidents, train smashes, shipwrecks, etc.), as well as "designed calamities" (wars, social riot, terrorist acts). PTSD may also develop in cases when a catastrophic situation is directed against one person (aggressions, rapes).

In ICD-10, PTSD is encoded as F-43.1. According to literature data, the morbidity rate of PTSD ranges from 10 % in catastrophe witnesses to 95 % in casualties. The cases of PTSD at peace-time make up 0.5 % among men and 1.2 % among women.

The clinical signs of PTSD develop after the patient goes out of the stress situation. The initial period of PTSD formation is characterized by anxious-phobic states with tearfulness, nightmares, disturbances of derealization and depersonalization. The patients develop influxes of unpleasant recollections, related to the psychic trauma, often of the annoying character and usually without any outward reasons. These recollections are extremely strong in the patient's consciousness and cause in him the same feelings as the real tragedy. A very strong feeling is also caused by various reminders of what has been suffered, e.g., in films, TV broadcasts, talks of one's associates. These secondary feelings develop against a background of some emotional dullness, social estrangement, reduced responses to the surroundings, anhedonia. The patients would try to avoid such situations and thoughts which could even remotely remind the tragedy endured. They develop diffidence caused by the fear to have agonizing recollections again; as a result, the patients become less sociable and postpone taking different decisions. Their sleep is disturbed, they suffer from memory loss, distractible attention, short and hot temper.

It is hard for the patients to associate with other people, even their relatives; they become reserved, estranged, sometimes malicious, with manifestations of outwardly unmotivated fits of aggression. At their jobs, such patients are not able to observe subordination and meet requirements of the labour discipline; in the families they are unable to share feelings of their relatives, rather often they would lose their job and family. Many of them begin to abuse liquor, narcotic drugs, toxic substances, it increasing their social dysadaptation even more. These behaviour peculiarities resemble the picture of the psychopathy-like syndrome. But typical for the patients with PTSD are anxiety, melancholia, the feeling of their own guilt, uselessness of their life, suicidal thoughts. They suffer from repeated recollections of the tragedy endured, which often appear abruptly in the form of vivid imagery representations (flashbacks) lasting for up to several hours and accompanied by expressed autonomic disorders. Many patients are afraid of falling asleep, because it is not in rare cases that "the tragedy is suffered" while sleeping. Usually the patients do not take medical advice, as they believe that the people who have not endured their tragedy are unable to understand them. In the majority of cases, recovery occurs with favourable family circumstances and good social conditions. But within the remote period there may be sleep disturbances and a pessimistic assessment of what is taking place in the surroundings. Some psychoorganic changes caused by various vascular disorders are likely to develop. Follow-ups show that complete recovery occurs in 30 % of PTSD cases, some residual mild abnormalities are observed in 40 % of the patients, moderate ones in 20 %, and deterioration of the state takes place in 10 % of the cases.

Treatment of patients with PTSD. Within the initial period, when some required and specialized aid is given to the patients who have survived catastrophes and natural calamities, psychopharmacological therapy should be administered too. The most suitable for such cases are small doses of tranquillizers or antidepressants aimed at normalization of sleep and reduction of the mental stress.

In chronic PTSD, the following groups of drugs are recommended:

- anxiolytics: clonazepam, propranolol, clonidine;
- antidepressants: amitriptyline, imipramine, phenelzine, fluoxetine, sertraline;
- mood stabilizers: lithium salts;
- anticonvulsants: Depakene, valproic acid.

Very important is psychocorrecting aid within the subacute and remote periods.

At certain stages of PTSD the patients usually do not take medical advice, as they do not regard their state as morbid and are afraid that attendance of psychiatric establishments may affect their social status. Psychological correction, at the same time, is extremely important for these patients. They should be convinced of the necessity to receive the therapy. The patient should be taught to regard his disorders as a normal response to the psychotraumatizing situation. The patient should not avoid anything connected with the psychic trauma (in particular, recollections of it), it is necessary to help him process it rationally and overcome emotionally. This work requires great tact and patience of the psychotherapist, it should be conducted with regard for cultural and national peculiarities of the people who have survived a catastrophe. Rendering of psychological aid should last from a few months to 1-2 years.

Control questions:

1. List the neurotic reactions:

2. Clinical picture of neurasthenia:

3. Clinical picture of hysterical neurosis and its variants:

4. Clinical picture of neurosis of obsessions:

5. Give a definition of somatization disorders:

6. Criteria of diagnosis PTSD:

Test questions:

1. The patient, 26 years old, the seller. The heredity is not burdened by mental illness. She is impressionable, dreamy by the character. She got sick after she received news that a train had hit her mother. She gasped and fell down to the floor. At examination patient was lying motionless, her eyes closed. She did not answer for questions, did not follow the instructions. Her lifted hand fell like a whip. After caffeine - barbamil disinhibition she opened her eyes, called his name, surprised asked where she was. She cried, told about her mother's death. What is the most probably diagnosis in the patient?

- A. Hysterical reactions
- B. Reactive depressions
- C. Epilepsy
- D. Psychogenic stupor
- E. Catatonic stupor

2. A 23- year-old patient was distrustful, sentimental, cannot assert oneself. She had her hands full. She worked without a vacation for last year. She had often quarrels with her husband because she could not pay enough attention to her family. The last 2-3 months she became irritable, had disturbance of sleep, appetite and weight were decreased, weakness, fatigue appeared. These symptoms was the most expressed in the second half of the day. Palpitations, heart pain, headache were worried. The therapist did not detect the pathology of the heart. Determine the diagnosis of the patient.

- A. Cyclothymia
- B. Asthenic psychopathy

- C. Schizophrenia
- D. Neurasthenia
- E. Acute stress reaction

3. Patient T., 30 years old, was hospitalized in a psychiatric hospital. Demonstrative, moodiness, circumlocution was observed in her behavior. The patient constantly tried to attract the attention of other people. He complained to pain throughout all the body. When she saw the doctor, she was groaning, crying, clutching his head, she demonstrated inability to walk, she walked clinging to the surrounding objects. When she was alone, she was freely walking in the ward, singing, putting makeup. Determine the diagnosis of the patient.

- A. Hypochondriacal development of personal
- B. Neurosis of obsessions
- C. Hysterical neurosis
- D. Schizophrenia
- E. Bipolar affective disorder

4. A 42-year-old patient was convinced that he was suffering due the stomach diseases, because he had sometimes felt heaviness, belch after eating. He considered that these symptoms were manifestations of the disease, convinced that he had a stomach ulcer. He was fixed to these symptoms. The patient called upon doctor with a request to establish a diagnosis. During the examination, additional methods of investigation have shown absent any objective signs of pathology in the stomach. The patient was agree with the views of doctor, but it did not help him eliminate his thoughts completely about the disease. The patient began to think about the "stomach cancer". What is the most probably diagnosis in the patient?

- A. Somatized disorder
- B. Hypochondriacal disorder
- C. Somatoform autonomic dysfunction
- D. Chronic somatoform painful disorder.
- E. Somatized depressive disorder

5. A 30-year-old woman complains of pain in the heart area ("aching, piercing pain") that arises primarily in the morning hours in autumn and spring. Pain irradiates into the neck, back, abdomen and is attended by rapid heart rate and low vital tonus. This condition occurs independently from physical exertion. In the evening her condition improves. Somatic and neurologic state and ECG have no pathologies. What pathology is likely to result in such clinical presentation?

- A. Somatized depression
- B. Rest angina pectoris
- C. Pseudoneurotic schizophrenia
- D. Somatoform autonomic dysfunction
- E. Hypochondriacal depression

Situational tasks:

The patient 32-years-old. When she saw the news about the impact of the hurricane in California, she acutely reacted to it. She started crying, then she became a closed, felt immersion within oneself, complained of the bad mood, irritability, internal stress with the inability to relax, fears, unmotivated worried, anxiety. From history had known that the patient was the victim of a natural disaster during a vacation in the islands one year ago. What is the most probably diagnosis in the patient? What are the criteria of this diagnosis?

The patient, 57 years old, she has menopausal phenomena. The patient says that the neighbors pour it under the door of the poison, let gas, harm the garden. Nobody talks about it except her husband. He now also believes that sometimes the food has a distinctive taste, there is a gas in the air. He graduated three classes, distinguished by diligence and accuracy, easily subjected to the influence of others. Put the preliminary diagnosis. What additional research methods should be used?

A 35-year-old man is brought to see a psychiatrist by his friend because “ever since the disaster that killed his wife, he has been out of it.” The patient states that 1 week previously the town in which he lived was hit by a tornado. His house was destroyed, and his wife of 2 years was killed. The patient states that he feels as if “I’m living in a fog – this just can’t be real.” He says that he feels disconnected from everything and everyone – he knows they are trying to help him, but he just feels numb. He claims that when he closes his eyes, all he sees is an image of his wife being buried under rubble, and he hears the loud roar of the tornado. The patient says that since that time he has isolated himself from others as much as possible so that he does not have to talk about what happened. He has not slept well for several days, and when he hears a loud noise, he thinks the tornado is coming back, which makes him very anxious and jumpy. He has been unable to work and has not called any of his insurance companies to tell them about the disaster. The patient states that he has never been to a psychiatrist before and came today only because his friend insisted.

1. What is the most likely diagnosis for this patient?

2. What should be the next step in his treatment?

CLASS 8.

SCHIZOPHRENIA. CLINICAL FORMS AND TYPES IN THE COURSE. TREATMENT.

ACUTE AND TRANSIENT PSYCHOTIC DISORDERS. THE FIRST EPISODIC OF PSYCHOSES.

AFFECTIVE DISORDERS. CLINICAL MANIFESTATIONS, TYPES IN THE COURSE. TREATMENT.

Schizophrenia is a chronic mental disease with unclear etiology, which develops on the basis of hereditary predisposition and is characterized by changes of the personality in the form of autism, emotional flattening, reduced activity, loss of the integrity of mental processes with various productive psychopathological symptoms.

The term “**schizophrenia**” comes from Greek words “schizo”, which means “to split, crack”, and “phren”, which means “soul”. Thus, the term emphasizes the main sign of the illness: a disturbance of the integrity, unity of the mind and an inadequacy of mental responses to external stimuli.

The spread of schizophrenia among the population is from 7-8 cases in 1,000 people to 1-2%.

According to modern concepts, schizophrenia belongs to a group of genetic predisposed diseases, which origin is multifactorial. The acquired genetic predisposition each individual patient can be realized only in the interaction of internal and environmental factors.

Clinical manifestations

The most important for clinical practice is division of the schizophrenia symptoms into basic, permanent (negative), typical for all the forms of the illness, and additional (secondary, “productive”), typical for some or another form.

The Four A`s

(primary symptoms of schizophrenia described by E. Bleuler):

1. **Associational** disturbances (thought disorder)
2. **Affective** disturbances (flattering of affect)
3. **Autism**
4. **Ambivalence**

Productive symptoms are called new morbid phenomenon, some new feature, which appeared as a result of the disease, which are absent of healthy people. Examples of positive symptoms are *delusions and hallucinations, epileptiform paroxysms, psychomotor agitation, obsessions, strong sense of melancholy depression*. Productive symptoms are quite dynamic. It can dramatically increases in exacerbation of the disease, and then disappears by itself or influenced by appropriate treatment. Most psychotropic drugs used in psychiatry are intended for the treatment of productive symptoms. Productive symptoms tend to be less specific, so it may be similar in a few different diseases.

Negative symptoms (defect, minus-sign) are called defect that occurs due to illness in healthy natural functions of the body, loss of any ability. Examples of negative symptoms is inability to experience vivid emotional feelings (*apathy*). Negative

symptoms are usually irreversible. These symptoms indicate the duration of the disease and the depth of destruction of the mentality. Character of negative symptoms is specific and plays an important role in the diagnosis of schizophrenia.

Autism is disconnection of the personality from the environment, loss of contacts with other people, shutting oneself off, self-reservation, absorption into one's own world of the person's mannered autistic feelings. The patient becomes silent, avoids any contacts with other people, because he feels better alone. Even with the relatives, the verbal contact becomes formal, poor.

Emotional disorders are expressed in a gradual impoverishment of emotional responses. At first, higher emotions (compassion, altruism, emotional sympathy) are affected. Later the patients become cooler and more egoistic. They lose any interest in events at their job and their family. Severe cases develop emotional bluntness with an absolute indifference to the environment and one's own fate. Against a background of a significant impoverishment of the emotional life, some inadequacy and paradoxicalness of emotional responses is notable. The patient would laugh in an improper situation, quietly state the events which are sad for him and other people, but inadequately and often violently respond to quite insignificant causes. As a result of the splitting process in the emotional sphere, the schizophrenic can simultaneously combine two contradictory feelings: he loves and does not love, he is angry and happy, cheerful and depressed (ambivalent). The patients' mimics do not correspond to their feelings (paramimia), but demonstrates a splitting of their integral emotional mimic reactions. Emotional modulations of the voice and nuances of the intonation are lost; the patients would say about stirring and indifferent things in the same tone (a "wooden voice"). The style of dressing often changes too. Some patients become untidy, careless, while others begin wearing extremely extravagant and flashy clothes, losing even elementary tact and taste.

	Productive symptoms	Negative symptoms
<i>Disorders of sensation and perception</i>	cenesthopathy, pseudohallucinations, depersonalisation, derealisation	subjective feeling of self-changing (depersonalisation)
<i>Thought disorders</i>	alienation of thoughts, mentism, thought blocking, persecutory delusions (delusion of control), overvalued ideas, obsessions	autism, ambivalence, reasoning, schizophasia, obscurity of expression, paralogia, symbolism, philosophical intoxication, pontifical woolliness (up to incoherence) etc.
<i>Affective disorders</i>	anxiety, perplexity (acute delusion), mania or depression may be, but not specific	ambivalence, decreased affect (monotonous, flattering and incongruity of affect), apathy
<i>Disorders of will and behaviour</i>		ambivalence, loss of will and energy, abulia, parabulias,

		unexpected sexual behaviour, laziness, passivity
<i>Memory disorders</i>	not typical	
<i>Disorders of cognition</i>	not typical	
<i>Disorders of motor behaviour</i>	catatonia (stupor, excitement, echo-symptoms)	non-adaptive movements (mannerism)
<i>Disorders of consciousness</i>	dual orientation, oneiroid	not typical

A **splitting of thinking** also manifests itself by contradictory judgements and double orientation. In a long course of the illness in the defect state there may be absolute destruction of the thinking and speech. As a result, not only laws of meaning are violated, but syntactical and grammar ones are affected too (a “verbal crumb”).

Typical for schizophrenic thinking are symbolization, formation of new concepts, and compression of concepts. A disposition to futile judgments, empty fruitless philosophizing without any logic sense, abstract thinking, its estrangement from the reality, very abstract or strictly concrete generalization is observed.

Schizophrenics write in a very peculiar way too. Sometimes from left to right. Their writing abounds in mannered, ornate letters, underlining, exclamation marks, small vertical lines, symbolic designations and drawings.

The rate and course of thoughts are affected. Some patients reveal a flow of thoughts with a feeling of their artificial character – *mentism*, or disappearance of thoughts with a feeling of emptiness in the head – *sperrung*. Rather often are *perseverations* (repetition of the same words), *verbigerations* (repetition of the same phrases), and ornate expressions. The symptoms of “*open thoughts*” and “*sounding thoughts*” are observed; the patients state that their thoughts are read by people nearby, known for everybody.

Disorders in the **effector-volitional sphere** manifest themselves by a reduction in the purposeful activity (*hypobulia* and *abulia*), it being attributed to a “*lower power potential*”. The patients feel it more and more difficult to study and work. Any activity, mental in particular, requires much effort. Concentration of attention is very difficult. Communication with other people is tiresome. As a result, there are increasing problems in studies, professional degradation, or absolute incompetence in severe cases, the formal functions of the intellect being preserved.

Splitting of the mind is reflected by the patients’ behavior. In patients with schizophrenia, the struggle of motives in a volitional act is prolonged or does not end at all, so it makes taking of a decision impossible. It is shown by *ambitendency*, when the patient is unable to make any action because two opposite tendencies occur in him. In order to enter the doctor’s room, the patient would open the door, but immediately afterwards close it; he would make a step forward, and then back. He would like to shake somebody’s hand, but then take his hand off. The patient’s instinct life changes, the food, sexual and self-preservation instincts are reduced. Male patients at the age of 30 and older usually do not live a sexual life; as a rule, they masturbate and later regard it as the cause of their illness. Sometimes the sexual instinct is increased and insufficiently

differentiated, with resultant homosexuality and disordered sexual life. A higher sexual instinct in women causes their moral degradation earlier, than their morbid state becomes evident. The food instinct is reduced or distorted. In cases of a long course of the process the perversion may reach to coprophagia. The instinct for self-preservation may be increased, as it is demonstrated by aggressiveness, suicidal acts, self-injuries.

A purposeful activity is always affected to some or another degree. Typical for the patients is their strange behavior, absence of usual logic motives. Such patients often astonish with their absurd actions, though their formal intellectual functions are sufficiently preserved. A sensation of estrangement of their own thoughts, feelings and actions is a peculiar kind of the activity disorder. Some part of the mental activity is felt by the patient as not belonging to him, taking place independently of his will, automatically, against his intention (*Kandinsky-Clérambault syndrome*). Thus, a female patient, who sometimes shouts, dances, swears, states that all these things are done not by her, but the doctor who seized her will and directed her. She knows that she says and does “unnecessary things”, but this is because there is some foreign object in her larynx, “my larynx obeys somebody’s will”. Other patients say that “somebody decides in advance “what I must do”, they “are forced to think, remember, act”. Depersonalization symptom develops: a feeling of splitting of one’s own “ego”. The patient feels two “egos” inside him, says about himself in the third person, “he wants to eat, he went”, uses various family and first names for himself, states that together with his “ego” another one lives in him.

Besides the changes typical for schizophrenia, various productive (delirious, catatonic, hebephrenic and affective) symptom complexes appear and regularly change into one another in the course of the illness; they are responsible for the form of schizophrenia.

Clinical forms of schizophrenia.

Paranoid (F20.0) is the commonest form. Hallucinatory-paranoid symptoms develop against a background of mental splitting. The symptoms typical for this form are revealed at the age of 20-40. The appearance of the productive symptom is preceded by suspiciousness, over-anxiousness about one’s health, captiousness, and hypochondria. Exacerbation begins with the appearance of insomnia, anxiety, nervousness, shortness of temper. Against a background of a change in the general condition, there is development of the feeling of an environmental change, appearance of some barrier between the patient and the world. Delusions of reference, persecution, affection and poisoning develop. The patient states that his relatives and friends have changed their attitude to him; everybody in the street pays attention to him, watches him, points at him, and talks about him. The delusions manifest themselves by the patient saying that his organism or mind is subjected to the influence of hypnosis, electrical current, some invisible energy. Sometimes these delusions astonish with their absurdity. The patient may state that having touched door handles he caught syphilis or AIDS, that some animal started living inside his body, that his internal organs have rotten, the food is not digested, “there are piles of pills in my stomach”. In the onset of the illness the delusions are of an unsystematized and fragmentary character, with time they take a form of some system, often queer-symbolic, with ideas of power, grandeur, reforming; i.e. they get paraphrenic features. The delusions are accompanied by verbal hallucinations and illusions: “they talk

about me”, the patients hear somebody calling their names, some words and phrases, “voices”. The latter directly concern the patient, condemn, frighten, threaten him, often are imperative. They, particularly the frightening and imperative ones, create some anxious mood, arouse fear. Often paranoid schizophrenia develops Kandinsky-Clérambault syndrome: a combination of psychic automatisms, pseudohallucinations and delusions of affection, estrangement of one’s own thoughts, actions and “ego”, the patients say about themselves like about an externally controlled automaton. Pseudohallucinations differ from real ones by the fact that the “voices” are heard inside the head and body parts, with their “inner sight” the patients see some figures and parts of their internal organs. Rather common are tactile hallucinations and cenesthopathies. The patient feels that his head, throat and genitals “are pierced with electrical current”, the internal organs are twisted, burst, etc. Olfactory and gustatory hallucinations are not common, but they are particularly unpleasant. The patient feels even smells exhaled by himself rather than by the outside world only (smells of a corpse, intestinal gases, blood, decomposed sperm, etc.). These hallucinations are particularly typical for an unfavorable course of the illness. Visual hallucinations are rare. Usually they are fragmentary, colorless, non-scenic; more frequently the patients see faces or their parts, figures. The patient says that he saw through the wall, a flap of the overall and the hand, and knew that it was the doctor’s hand which “drew a white line of my temperature curve on a white wall with chalk”. Another patient “saw” some bent figure and knew that it was his dead brother, etc. Illusions are rather commonly observed. The patient would take a knock at a door for a shot, explosion; the patient with delusions of persecution would perceive clattering of kitchen utensils as clanking of weapons.

In compliance with the contents of the delusions and hallucinations, the patient’s behavior changes. He can be dangerous for both himself and other people. Under the influence of imperative hallucinations the patient would refuse taking food, inflict self-injuries, and commit suicide. Delusional motives may make the patient be aggressive, kill somebody. It is not in rare cases that the patients would dissimulate their feelings for years; as a result, they may be prematurely discharged with severe consequences.

Hebephrenic (F20.1) is the most malignant form of schizophrenia, which begins at the juvenile or young age. This form is characterized by senseless foolish behavior, emotional disorders in the form of rough inadequate emotions, foolishness, absurd grotesque hilarity, which does not involve other people but astonishes and frightens them. Typical for hebephrenic excitement are purposeless grimacing, clowning, somersaulting. The patients would jump on their beds, roll on the floor, try to hit, laugh at once, shamelessly bare themselves, and masturbate. They are untidy, slovenly and voracious, may purposely urinate and defecate in the beds. Turns of their speech, intonation in particular, are pretentious, they would speak in an unnatural voice, lisp like children, torture words and use obscene ones. Their thinking is poor, paralogic and stereotyped. Thus, a patient may jump on one leg, beat himself on the face, laugh and stereotypically repeat “twice two is a rabbit”. Sometimes the patients’ speech resembles a senseless set of words or phrases. This form of schizophrenia starts in puberty (13-15 years), course of the disease without remission, patients state invalidity wary quickly.

Hallucinatory-delirious manifestations are fragmentary and astonish with their absurdity. A sudden transition from foolishness and euphoria to hypochondria is often

observed. This form is characterized by an extremely unfavorable prognosis and usually rapidly (during 1-2 years) results in disintegration of the personality and dementia.

Catatonic form (F20.2) begins at a young age and manifests itself by an alternation of catatonic excitement and catatonic stupor. In recent years the typical kind of this form has been seldom observed. Catatonic excitement is absurd, stereotyped, and purposeless. The patients are impulsive and unreasonably aggressive; they would shout and make faces. Their movements and gestures are monotonous, stereotyped and awkward. Particularly mannered and pretentious is the patients' gait: with jumps, stops and swift impulsiveness. The thinking is noncontiguous and paralogic, the speech is stereotyped, has verbigerations (repetitions of the same phrases, words and gestures) and neologisms. The patients would repeat words (echolalia) and gestures of the other people (echopraxia). They would stubbornly resist everything, make the opposite to what they are asked about (active negativism), often tear off their clothes, and make self-injuries. Catatonic stupor is absolute immobility with muscular tension, mutism, negativism, refusal to eat. The patient would often lie in the embryonal position, resist any attempts to change it (active negativism), on examination actively resist taking his pulse and temperature and feeding him, would not follow instructions (passive negativism). Feeding in such cases is performed through a tube. Phenomena of catalepsy (wax flexibility) are observed: preservation of the position, given to the body, extremities or head, for an indefinite period of time ("air pillow"). Consciousness during the stupor may be absolutely preserved, and after the stupor passes away the patients describe in detail everything that took place. Catatonic-oneiroid states are characterized by immobility and somnolent cloudiness of consciousness. Various fantastic, often catastrophic situations are experienced (war, earthquake, shipwreck), where the patient does not participate and only observes them, but at the same time "feels particular responsibility for everything that takes place". The expression of horror on the face changes into some interest and ecstasy depending upon the contents of hallucinations. The patients can describe their feelings later, they perceive real events in a fragmentary way, and the environment is perceived in compliance with the dream-like fantasies (other patients were taken for extraterrestrials, the hospital itself for some camp, etc.).

Simple form (F20.6) is the brightest manifestation of the basic symptoms of schizophrenia: a reduction of volitional activity, affective bluntness and disturbances of thinking, whose totality is designated as the apathoabulic syndrome. The illness begins gradually, more frequently in children and youths. Listlessness, apathy and indifference augment. The patients begin studying bad and missing classes, they develop a disposition to prolonged idleness, spend a larger part of the day in bed, become still more reserved, silent, lose social relations and friends. Emotions grow dull; indifference and even some hostile attitude towards the relatives appear. They lose any interest in their clothes and outward appearance, become slovenly, do not wash themselves, do not change their underwear, sleep with their clothes on. They lose diffidence, develop a disposition to impulsive actions and vagabondage, in some cases openly masturbate. The behavior becomes absurd; as a rule, the patients have neither any plans nor prospects, but it does not upset them, also they are not troubled by the fact that being young and physically healthy they live at their parents' expense and do not help them at all.

Besides, the patients may develop absurd and strange interests, which do not

correspond to their age and position, as well as a disposition to scholastic fruitless judgments (philosophizing), contradictory statements. Their thinking is characterized by sliding down to an unexpected subject and breaks in thoughts. The patients' appearance is peculiar, their movements are awkward, expressiveness of mimic responses is lost, the voice becomes monotonous (a "wooden voice"). Productive symptoms (delusions and hallucinations) are seldom observed, they are rudimentary, short-term and do not produce any effect on the course of the disease. The prognosis is often unfavorable, because the simple form is diagnosed late and the patients are admitted to hospital already having signs of the defect formed.

The types in the course of schizophrenia are distinguished depending upon the progression of the illness, the rate and degree of augmentation of schizophrenia symptoms, peculiarities in its clinical syndromes which prevail in the picture of the disease.

Process schizophrenia is characterized by progressively augmenting schizophrenic changes and absence of any spontaneous responses. Remissions usually result from treatment and last till supporting therapy is given. The degree of progression varies: from a slow course with slight changes in the personality to deep devastation and its destruction. Particularly malignant is the course of schizophrenia which began in children and youths: malignant hebephrenia, hallucinatory-paranoid, simple forms.

Paroxysmal progressive schizophrenia is characterized by a paroxysmal course. The attacks last from 2-3 weeks to a few months and alternate with light periods, remissions, whose duration ranges from 1-2 weeks to several months and even years. The quality of the remissions is various. They may be complete (a practically full recovery) or incomplete (with signs of schizophrenic defect or residual phenomena of the attack). With every new attack the quality of remission becomes lower, and the attack itself acquires new unfavorable (hebephrenic, hallucinatory-paranoid, schizophasic) symptoms.

Recurrent (periodical) schizophrenia is characterized by attacks of atypical depressive or maniac phase with stable remissions. Eventually, the attacks become more frequent and prolonged. This course is typical for schizoaffective psychoses.

Types of remissions. Depending upon the degree of reduction of psychotic symptoms and expressiveness of dissociative-apatetic disorders, a remission can be complete, incomplete or partial.

Complete remission (remission A) is a complete reduction of productive psychotic syndromes with insignificant expressiveness of negative symptoms which practically do not change the patient's capacity for work, his family and everyday life; occupational reorientation is necessary only in some cases.

Incomplete remission (remission B) is a complete reduction of productive psychotic syndromes with moderately expressed changes necessitating rehabilitative measures: a change of profession (work with limited loads), or getting a job at special shops of industrial enterprises.

Remission C is a significant reduction of psychotic symptoms (residual delusions, which lost their actuality, and some hallucinatory phenomena are possible) with an expressed apathetic-dissociative defect plus a loss of capacity for regular and professional work. The patients are adapted to work at medical industrial workshops of mental and day hospitals.

Partial remission (remission D), an intrahospital improvement, is characterized by only an insignificant improvement of the state with some loss of actualization of psychotic phenomena. The patients are subject to further treatment at in-patient department.

The differential diagnosis of schizophrenia must be based, first of all, on specific negative symptoms: autism, emotional impoverishment and inadequacy, reduced activity, disturbances of thinking, such as splitting, paralogism, philosophizing, symbolism. The expressed polymorphism and changeability of productive psychopathological symptoms make them less reliable diagnostic signs of the illness. Diagnosing also takes into account the dynamics of the disease characterized by a progressive course and augmentation of negative symptoms of deficit. Manifestations of the illness are often preceded by psychic traumas, previous brain injuries, infectious diseases, and intoxications. In this connection, schizophrenia has to be differentiated from reactive (psychogenic), organic (somatogenic, infectious) psychoses. Situational psychoses (reactive paranoid, reactive depression) are characterized by psychological clarity of morbid feelings; they reflect the contents of a psychotraumatizing situation and disappear after its solution. Typical for the course of exogenous-organic psychoses is prevalence of asthenic symptoms, hallucinatory (more frequently visual) disorders, syndromes of disturbed consciousness (delirious, twilight) and memory, personality changes by the organic type.

The simple form of schizophrenia at certain stages of its course may resemble manifestations of psychopathy and protracted neuroses, asthenopathic depression. The differential diagnosis is facilitated by a careful study of the case history, dynamics and typical schizophrenic changes in the emotional and cognitive functions. Schizoaffective psychoses are differentiated from the manic-depressive one. Appearance of acute imagery delusions, hallucinations, delusions of persecution, phenomena of psychic automatism and catatonic disorders in the structure of an attack, as well as formation and augmentation of personality changes between attacks tilt the diagnosis in favour of schizophrenia.

Febrile schizophrenia has to be differentiated from symptomatic (somatogenic) psychoses. In all its cases, febrile schizophrenia begins with catatonic excitement or substupor with oneiroid cloudiness of consciousness, these symptoms being untypical for symptomatic psychoses, where the above disturbances develop at certain stages of the illness against a background of a severe somatic state, shortly before the lethal outcome. Febrile schizophrenia should be differentiated from the malignant neuroleptic syndrome with hyperthermia as a result of treatment with neuroleptics (particularly haloperidol and other derivatives of butyrophenone), often with large doses, but this syndrome may develop even after small doses in cases of sensitivity to the drug.

Postpartum psychoses, caused by puerperal sepsis, should be differentiated from schizophrenia provoked by pregnancy and delivery. The presence of delirious episodes and catatonic disorders at the height of amentia are the signs in favour of symptomatic psychosis, whereas the development of amentia after catatonic excitement is more typical for schizophrenia. If a psychosis develops 2-3 weeks after the delivery and later within an uneventful puerperal period, the diagnosis of postpartum psychosis is doubtful. Acute polymorphous schizophrenia may have much in common with infectious and intoxication-induced psychoses. The final diagnosis is made in the process of a long-term

supervision.

The differential diagnosis of schizophrenia must be carried out mainly in three directions distinguish from organic disease (trauma, intoxication, infection, atrophic processes, tumors), affective psychosis (in particular, bipolar affective disorder) and the functional psychogenic disorder (neurosis, psychopathy and reactive states).

Peculiarities of childhood-onset schizophrenia

The signs and symptoms of childhood schizophrenia are nearly the same as adult-onset schizophrenia. Some of the earliest signs that a young child may develop schizophrenia are lags in language and motor development. Some children engage in activities such as flapping the arms or rocking, and may appear anxious, confused, or disruptive on a regular basis. Children may experience symptoms such as hallucinations, but these are often difficult to differentiate from just normal imagination or child play. It is often difficult for children to describe their hallucinations or delusions, making early-onset schizophrenia especially difficult to diagnose in the earliest stages. The cognitive abilities of children with schizophrenia may also often be lacking, with 20% of patients showing borderline or full intellectual disability.

Very early-onset schizophrenia refers to onset before the age of thirteen. The prodromal phase, which precedes psychotic symptoms, is characterized by deterioration in school performance, social withdrawal, disorganized or unusual behavior, a decreased ability to perform daily activities, a deterioration in self-care skills, bizarre hygiene and eating behaviors, changes in affect, a lack of impulse control, hostility and aggression, and lethargy.

Auditory hallucinations are the most common positive symptom in children. A child's auditory hallucinations may include voices that are conversing with each other or voices that are speaking directly to the children themselves. Many children with auditory hallucinations believe that if they do not listen to the voices, the voices will harm them or someone else. Tactile and visual hallucinations seem relatively rare. Delusions are reported in more than half of children with schizophrenia, but they are usually less complex than those of adults. Other symptoms of the disorder include problems paying attention, impaired memory and reasoning, speech impairments, inappropriate or flattened expression of emotion, poor social skills, and depressed mood. Such children may laugh at a sad event, make poor eye contact, and show little body language or facial expression. Children with schizophrenia experience difficulty in managing everyday life. They share with their adult counterparts psychotic symptoms (hallucinations, delusions), social withdrawal, flattened emotions, increased risk of suicide and loss of social and personal care skills.

Treatment

The system of therapeutic measures in schizophrenia is conventionally divided into separate stages: controlling therapy is directed at regressing psychotic symptoms; stabilizing therapy is the period of restoration of the previous level of psychological, social and occupational adaptation; preventive (maintenance) therapy.

Schizophrenics can be treated both as in- and outpatients. The treatment must be complex: with use of both psychoactive drugs and such methods of treatment which are directed at the normalization of the somatic sphere, vascular, neurodynamic and other processes. The treatment is to be provided proceeding from the basic psychopathological

syndrome, the clinical form, course and stage of the disease, the patient's age, his somatoneurotic state. Therapy with psychoactive drugs is the basic method of active (biological) therapy.

At the mental disorders with prevalence of delusions, hallucinatory manifestations, expressed psychomotor excitement are indicated neuroleptics: haloperidol, chlorpromazine, clozapine, fluanxol, clopixon, amisulpride. For schizophrenia and chronic delusions disorders, there is a need prolonged maintenance treatment. In this case, uses long-action neuroleptics: Clopixon-depot Moditen-depot, Fluanxol-depot, Haloperidol-decanoate, Rispolept Konsta, Xeplion, Zyprexa Relprevv (1 injections are given every 2-4 weeks). Doses are selected individually depending on individual sensitivity. In cases when negative mental disorders are prevalent, antipsychotics with stimulating effect are prescribed, as well as atypical antipsychotics (risperidone, clozapine).

Treatment with neuroleptics may give rise to complications in the form of the neuroleptic syndrome: parkinsonism, akathisia, dystonic phenomena. Parkinsonism is controlled with correctors: ciclodol, triphen, parkopan.

In recent years, atypical antipsychotics are used in therapy of schizophrenia: risperidone (Rispolept), olanzapine (Zyprexa), azaleptin (Leponeks), amisulpride (Solian), quetiapine (Seroquel), aripipraole (Abilify), paliperidonum (Invega) which, in contrast to typical neuroleptics, affect not only the productive symptoms, but atypical antipsychotics also reduce the negative symptoms as well as they lead to develop various complications very rarely. In this way, atypical antipsychotics have a positive effect on patients' quality of life.

Rehabilitation includes measures for preservation (in case of its loss – at least, partial restoration) of the patient's social status, including his capacity for work, family relations, an active life in the society. A complex of rehabilitative measures is conducted at all the stages of treatment. It consists of the maximally possible lessening of restrictive measures for the patients; e.g., their staying at some closed department or observation ward, as well as an active involvement of occupational, culture and group therapy, as acute manifestations of the illness are controlled. Therapeutic vacations with a possibility to spend weekends at home should be widely used, or the patients should be transferred to day hospitals. Hospitalization should last as little as possible, because a long-term stay at mental hospital may cause a loss of social skills and an ability to live independently, it suppresses the wish to work, it may break family relations, i.e. result in hospitalism.

Very important is to have an adequate job, which should correspond to the patient's state. Even in incomplete remission and maintenance therapy it is necessary that students go on their studies and working people work under relieved conditions (studies at night school, at home, work at home, at medical industrial workshops, work with an incomplete load). Labour restrictions should depend upon the sphere of activity or study.

The primary prophylaxis consists in sanitary-educational work: marrying schizophrenics should be informed about a risk of the disease in their posterity, a necessity to receive genetic consultations, as well as about a risk of falling ill as a result of using hashish or amphetamine. The secondary prophylaxis is aimed at prevention of relapses through maintenance treatment and a healthy way of life. The tertiary prophylaxis includes social-rehabilitative and therapeutic measures at the stage of

remission with the purpose to prevent formation of a defect.

Forensic psychiatric examination. Accordingly, the law, the concept of insanity is defined as follows:

1. Insanity means the absence the capacity of correctly control one's own actions and be aware of them.

2. Person, who have been insane during the socially dangerous unlawful action - could not be conscious of the actual nature and social danger of his actions (inaction) and control them caused by schizophrenia is not held criminally responsible,

3. The court assigns compulsory medical measures for a person who has committed under criminal law a socially dangerous act in the state of insanity

The medical labour examination. Expert is required to detailing examine of previous social-labor behavior of the patient with schizophrenia and the prognostic value of his clinical condition to address the issue of his disability. All this will make the right expert conclusion. In case of a persistent reducing of capacity to work of the patient with schizophrenia, expert should also determine its degree.

Medical military psychiatric examination. People are suffering from schizophrenia are determined as unfit to military service

Schizotypal disorder F21 Differences between schizophrenia and schizotypal disorders are far from being always marked. A supposition is made that a patient with schizotypal disorder has some genetical predisposition to schizophrenia, in a favourable social situation he is not decompensated and only subpsychotic manifestations are observed in him. In stress situations the patients may be decompensated, they develop short-term psychotic symptoms, the suicide rate being 10 %. The diagnosis of schizotypal disorder is based on the presence of at least 4 of the following signs in the clinical picture during more than 2 last years:

- 1) emotional coldness, not always adequate situations of personal contacts;
- 2) eccentric strange behaviour and appearance;
- 3) a tendency to avoid social contacts;
- 4) strange, often metaphysical thoughts which do not conform to subcultural norms;
- 5) mistrustfulness, suspiciousness;
- 6) annoying reflections on one's own personality with dysmorphophobic, sexual or aggressive contents;
- 7) unusual feelings, phenomena of derealization and depersonalization;
- 8) diffuse thinking which does not reach to the extent of non-continuity;
- 9) periodical transitory subpsychotic episodes (more frequently with illusions, hallucinations, delusion-like ideas).

The differential diagnosis of schizotypal disorders with schizophrenia and schizoid psychopathy is extremely difficult, therefore ICD-10 adequately does not recommend to widely use this item of the classification.

Chronic delirious disorders F22. These are disorders with dominating, encapsulated and systematized delusions without any marked change in the personality. Their rate is 25-30 cases per 100,000 of population. The disease begins at a middle age, oftener at 30-40 years. The patients seldom take medical advice, more frequently they are sent by their relatives.

Often the onset of the disease is triggered by an unfavourable psychological situation. The patients may express delusions with various contents. The system of the delusions may have different degrees of their complex character. The illness is notable for absence of formal disorders of thinking, though delusions are often expounded loquaciously, thoroughly and whimsically. The patients may be aggressive and dangerous for other people. Suicidal tendencies are not rare. There is no criticism to delusions. Besides the acts and opinions reflecting the contents of delusions, the patients' behaviour does not differ from the normal one. Emotional feelings correspond to the contents of delusions, which most frequently are of a pure personal character. Delusions may be of the kinds described below.

erotomaniac delusions, delusions of love charm. The patients are convinced that some person with a high social status (some chief, celebrity, businessman, etc.) is in love with them, though often they are not even acquainted with him. The feeling is expressed in spiritual relationship and romantic love, rather than sexual attractiveness. Often the patients try to establish a contact with the object of their delusions. These disorders are more typical for women. Delusions of grandeur. The patients are sure that they have exceptional abilities and talent which are not recognized by other people. They declare that they have made some discovery important for the mankind, that they maintain special relations with celebrities or deities, often becoming leaders of religious sects. In delusions of jealousy (Othello's syndrome) the patients would look for adultery, spy on their spouses, often manifest aggression with respect to their spouses or lovers. Delusions of persecution are often accompanied by litigious behaviour or aggressiveness towards the people who, as the patient thinks, harm him. Patients with hypochondriacal delusions are sure that they give off a bad smell, that the functioning of their internal organs is affected. They would visit various internists asking for help.

The psychosis lasts at least 3 months, or the whole life in some cases. The etiology of the illness is unknown; suppositions about its biological origin have been made. As a rule, the treatment is symptomatic, with administration of antipsychotic drugs and antidepressants. Suicidal and aggressive tendencies in the patients are indications for hospitalization.

Acute and transitory psychotic disorders F23. The onset of psychotic states is acute. The clinical picture is characterized by delusions, hallucinations, excitement, non-continuous thinking. The morbid state lasts less than 3 month. Acute and transitory psychotic disorders may end with a practically full recovery, a complete restoration of the capacity for work and socialization.

Schizoaffective disorders F25. The clinical picture is represented by both affective and schizophrenic symptoms. The course is characterized by remissions in the form of practical recovery or, in some cases, mild signs of a schizophrenic defect are formed.

AFFECTIVE DISORDERS

Affective disorders in the form of maniae and melancholiae were known in ancient times. They were vividly described by Hippocrates and regarded as separate diseases. On the basis of clinical observations and researches, Kraepelin (1896) concluded that maniac and melancholic attacks without a progressive course are the same disease termed by him

as manic-depressive psychosis. Still the modern psychiatry uses such designations as “affective psychosis”, “phase psychosis”.

Classification of affective disorders by ICD-10

F3 Affective disorders (mood disturbances)

F30 Maniac episodes

F31 Bipolar affective disorder (**BAR**)

F32 Depressive episodes

F33 Recurrent depressive disorder

F34 Chronic (affective) mood disturbances, including cyclothymia (F34.0) and dysthymia (F34.1)

F38 Other (affective) mood disturbances

F39 Unspecified (affective) mood disturbances

A bipolar affective disorder (BAR) is an endogenous disease characterized by alternation of outwardly contradictory states or phases, maniac and depressive, with presence of a light interval between them (the bipolar course). In other cases, the illness may manifest itself only by its maniac or depressive phases (the monopolar course). In any type of the course there is no progression and destruction of the personality. Manic-depressive psychosis is characterized by a seasonal prevalence in the appearance of phases (oftener in spring or autumn), the number of phases in different patients is not the same, the phases last from 3 to 6 months. The rate of manic-depressive psychosis in the population ranges within 0.07-7 %, depressive forms with a monopolar course being prevalent. Females fall ill 3-4 times more frequently than males, but the bipolar course of the disease prevails in males. Manic-depressive psychosis oftener begins at a mature age of 35-40 years, the onset of the bipolar disorder being somewhat earlier (20-30 years).

Clinically, manic-depressive psychosis manifests itself by affective, effector-volitional disturbances (which at maniac and depressive phases are of the opposite character) and those of understanding, as well as by somatoautonomic symptoms demonstrating, as V.P. Protopopov showed, a higher tonus of the sympathetic autonomic nervous system (Protopopov's triad: spastic colitis, mydriasis, tachycardia).

The maniac phase (F30) manifests itself by three clinical signs: a) a disturbance in the emotional sphere: an increase of the vital emotion of joy (euphoria); b) a disturbance in the intellectual activity: an acceleration of the rate of associations, in severe cases reaching to “galloping ideas”; c) effector-volitional disturbances: a general increase of purposeful activity with a reduced concentration and a higher attractiveness of attention.

Clinically, maniac states manifest themselves by a higher, cheerful mood, which as a rule is displayed without any external apparent cause. The positive emotions of joy, happiness, general well-being are augmented, i.e. euphoria develops. The patients' environment is perceived by them through a prism of positive emotions. The patient sees it in attractive, delightful, charming colours, “as if through rose-coloured spectacles”. Reactive emotions are not deep and unstable. The spirits remain high even when the patient receives some bad news or has misfortunes. The patient believes that everybody treats him well; he is pleasant and interesting for everybody. He is sociable, talkative, easily strikes up new acquaintances, visits his friends and relatives, and continuously

amuses himself. The rate of his thinking is accelerated. The patient would talk much without a stop, sing songs. In severe maniac states the rate of thinking reaches to “galloping ideas”. The speech is usually accompanied by active expressive mimics and gestures. The patients would overestimate their abilities and capacities, sometimes saying delusion-like ideas of grandeur, invention, one’s own superiority and exclusiveness.

The patients constantly demonstrate an urge to act (psychomotor excitement). Their attention is not stable, they are extremely distractible. Showing a higher interest in activities, they would undertake to do some work, drop it, being rapidly distracted and always in a hurry somewhere. Instincts in the patients at the maniac state are augmented. A higher erotism manifests itself by coquetry increase, mannered smart clothes and decorations, love-letters and search for amorous adventures. Augmentation of the food instinct manifests itself by voracity. The patients would much and irregularly eat, but do not gain any weight. Very typical for the patients is their indefatigability: being all the time in movements and actions, they do not display any signs of tiredness and weariness in spite of insufficient sleep for weeks and months. Such patients would sleep 2-3 hours a day. As a result of high spirits, reduced criticism and psychomotor excitement, the patient often gives hollow promises, undertakes higher engagements, lightly appropriates somebody else’s property, commits embezzlements in order to satisfy his needs and implement “far-reaching plans”, establishes irregular sexual relations. Criticism to their state is absent; the patients do not regard themselves as ill and refuse treatment.

Disturbances of perception are not deep and manifest themselves in the form of visual and auditory illusions, pareidoliae and metamorphopsiae (a symptom of “false recognition”). Memory becomes extremely retentive (hypermnnesia), the patients recollect the pettiest details from their personal and social life, the books they have read and the films they have seen. The maniac phase of manic-depressive psychosis lasts 3-4 months.

At the maniac phase of manic-depressive psychosis, somatic and autonomic disturbances are observed; they are caused by a higher tonus of the sympathetic section of the autonomic nervous system (Protopopov’s triad): tachycardia, higher blood pressure, loss of weight, a disturbance of menstrual cycle in women, insomnia. The patients do not make any complaints about their health, feeling cheerfulness and great strength. By the degree of expression of psychopathological symptoms the following mania are distinguished: mild maniac states (hypomania), mania without psychotic symptoms, mania with psychotic symptoms.

Hypomania (F 30.0) is a mild degree of maniac state characterized by slightly high spirits, increased energy and activity of the patient, a feeling of full well-being, physical and mental productivity. The above peculiarities are observed not less than several days.

Mania without psychotic symptoms (F 30.1) is characterized by markedly high spirits, a significant increase of activity with a resultant violation of occupational activity and relations with other people; this state requires hospitalization. An attack lasts not less than one week.

Mania with psychotic symptoms (F 30.2) is accompanied by delusions of overestimation, grandeur and persecution, hallucinations, galloping ideas, psychomotor excitement. An attack lasts at least two weeks.

The depressive phase (F32) of manic-depressive psychosis manifests itself by a

triad of disorders:

a) a sharp strengthening of negative vital emotions (melancholia, grief, sometimes with a shade of fear, anxiety);

b) a slower rate of thinking, its scanty contents, up to monoideism, development of delusions of being sinful and self-condemnation;

c) a sharp oppression of the effector-volitional activity, a deep inhibition (up to stupor), riveted attention.

The central place in the clinical picture of the depressive phase is taken by a vital affect of melancholia, grief, sorrow. A morbid depression is particularly augmented in the morning up to melancholia with despondency. The patients would complain of poignant melancholia with squeezing pains in the heart region, substernal heaviness, “precardiac melancholia”. It is impossible to distract the patient from this state and cheer up, under the influence of positive external stimulants the mood remains as it was before. The patients are inhibited (up to depressive stupor), not mobile and spend all the time in similar mournful postures. They would answer questions with a low monotonous voice, showing no interest in talks, express ideas of self-humiliation, self-condemnation, being sinful, in severe cases these ideas become delusions. They regard themselves as criminals, wretched and useless people, some “worthless stuff for the society and family”, a source of various evils and troubles for other people nearby. The patients interpret their previous behaviour in a delirious way, assigning themselves the most negative part. It is not in rare cases that the patients refuse to sit at a common table, to shake their interlocutor’s hand, to lie in bed, motivating it by the fact that they are not worth of it. As a rule, suicidal thoughts and attempts to realize them are observed. The patients do not make any plans for future as they do not see any prospects in it, they do not express any wishes but to die, but the latter may be concealed and dissimulated. The patients’ attention is concentrated on their own feelings, external stimulants do not cause any adequate responses. The instincts are suppressed (anorexia up to absolute rejection to eat, reduced libido, attempts of self-injuring and suicide). The patients do not feel the taste of their food, satiation, feeling of and saturation with sleep. Against a background of an increased depression and despair they may develop psychomotor excitement with suicidal attempts, a “melancholic explosion”. The patient would hit his head against a wall, scratch his face, bite his arms, etc. Suicidal attempts may be both impulsive at the moment of a melancholic explosion and more purposeful with preparation for a suicide. Sometimes the patients commit an “expanded suicide”, killing their children, old parents, and then themselves. Such actions result from delusions of having no prospects in the patient’s existence and of torments threatening his relatives for his own sins. Suicidal tendencies are more frequently realized at a period of reduced motor inhibition and constraint with preservation of melancholic feelings. Depressive patients need constant observation and control over their actions.

Along with augmentation of negative emotions there may be a loss of feelings when the patients say that they do not feel typical human emotions, they have become impassive automatons, insensitive to their relatives’ feelings, and therefore poignantly suffer from their own hard-heartedness, a symptom of “morbid mental anaesthesia” (*anaesthesia psychical dolorosa*); cenesthopathies and illusions are common. Depression is often characterized by such a symptom as distorted perception of time and space, as

well as psychosensory disorders with resultant feelings of depersonalization and derealization.

Like in the maniac phase, the somatoautonomic symptoms are caused by a higher tonus of the sympathetic nervous system: a loss of weight, persistent insomnia, the sleep does not refresh and in the morning the patients feel much worse than in the evening, the blood pressure is increased, lacrimation is difficult, the patients would not weep (grief, melancholia with “dry” eyes), they reveal dryness and bitter taste in the mouth, amenorrhoea in women.

Typically observed is **Protopopov’s triad**:

- **mydriasis,**
- **tachycardia,**
- **spastic colitis.**

The depressive phase often lasts more than 6-8 months. Depressive states occur 6-8 times more frequently than maniac ones. By the degree of their symptom expressiveness, mild, moderate and severe depressions with nonpsychotic and psychotic symptoms are isolated.

Mild depressive episode (F 32.0) is characterized by low spirits during the larger part of the day, a reduced interest in the surroundings and a feeling of satisfaction, a higher fatiguability, tearfulness. The patients regard their state as a morbid one, but take medical advice not in all the cases. Mild depressive episode occurs in two variants: a) without any somatic symptoms (F32.00); b) with somatic symptoms (F32.01). The somatic symptoms are as follows:

- 1) insomnia, wakening up 2 and more hours earlier than usual, or sleepiness;
- 2) fatiguability, a loss of strength;
- 3) a better or worse appetite, a loss of body weight or its increase without any relation to a diet;
- 4) a reduced libido;
- 5) constipations, dryness in the mouth;
- 6) headache and pains in different areas of the body;
- 7) complaints about the functioning of the cardiovascular, gastrointestinal, urogenital and locomotor systems.

Moderate depressive episode (F32.1) manifests itself by more expressed depressive symptoms.

Severe depressive episode without any psychotic symptoms (F32.2) is characterized by an absolute violation of vital activity resulting from a severe depressive state, abrupt low spirits with a feeling of vital melancholia and a tint of some physical suffering (precardiac melancholia, expressed psychomotor inhibition). The patients would express ideas of being sinful, have suicidal thoughts and commit suicidal acts.

In *severe depressive episode with psychotic symptoms F32.3*, there are signs of severe depression whose structure includes delusions of being sinful, reference, persecution, as well as hypochondriacal ones. Auditory, visual, tactile and olfactory hallucinations may be observed. The patient would hear funeral singing, feel a putrid smell of his “decomposing body”.

Depending upon the prevalence of some or other symptoms in the clinical picture of depression, the following variants of the latter are isolated: anxious-agitated,

hypochondriacal, masked. Along with melancholia, the clinical picture of anxious-agitated depression includes anxious excitement. The patients would rush about, moan, hit their head, wring their hands, fret. In such states they would often commit suicidal acts, as their motor anxiety facilitates realization of suicidal intentions.

Hypochondriacal depression is characterized by numerous unpleasant sensations in different parts of the body. They do not have any definite localization and are not comparable with painful sensations in organic sufferings. The patients would feel some pressing, boring, arching pain. It seems to them that their nerves have swollen, the intestines have dried up, the stomach is reducing in size, the liver has been corroded. The patients' complaints are peculiar, diffuse and cannot be grouped within the framework of some concrete somatic diseases. But unpleasant sensations are not hallucinations by their nature. They are not interpreted in a delirious way like in schizophrenics.

In masked depression, expression of the emotional component is insignificant, while motor, autonomic and sensitive disturbances prevail as depression equivalents. The patients would complain of general malaise, a loss of appetite, pains in the spinal column, stomach and intestines, insomnia and a reduced capacity for work. The pains are tormenting, and it makes the patients take medical advice. The “**masks**” may be in the form of pathocharacterological disorders (dipsomania, use of narcotics), asocial behaviour (impulsiveness, easy coming into conflicts, outbursts of aggression), hysterical reactions.

Diagnosing “latent depressions” it is necessary to take into account their following signs:

1. Presence of subdepressive states which are especially expressed in the morning.
2. Polymorphism, vagueness, abundance of persistent somatoautonomic complaints which cannot be grouped within the limits of some particular disease.
3. Disruption of vital functions (sleep, appetite, menses, potency, loss of weight).
4. Periodicity of the disorders, spontaneousness in their appearance.
5. Their seasonal character, mostly in spring and autumn.
6. Application of different methods of examination does not reveal any definite somatic disease.
7. Somatic therapy does not produce any effect.
8. The patient would be treated for a long period of time, persistently and without any result by doctors with different specializations, and despite failures would persist in visiting the doctors.

Along with typical maniacal and depressive attacks in manic-depressive psychosis, mixed states can be observed too and are characterized by coexistence of maniacal and depressive symptoms during an attack of the illness in the same patient. Several types of mixed states are isolated:

- a) depression with motor excitement and intellectual inhibition;
- b) maniacal stupor with motor inhibition;
- c) nonproductive mania: high spirits are combined with reduced psychic activity.

Mixed states can be separate phases of the illness, but more frequently are observed as a short-term episode between two opposite phases, during a transition from one of them to another.

Mild forms of manic-depressive psychosis are described under the name of

cyclothymia F34.0 and most often pass in the form of slightly expressed depressions with a relatively short-term course.

The variants of uniphasic affective psychosis in the form of sullen-irritable mood, which gradually develops, lasts about one year and gradually passes away, are termed dysthymia F34.1.

Age-specific peculiarities of manic-depressive psychosis. Children of the preschool age do not reveal any clinically definite manic endogenous or depressive phases, therefore they are partially assessed by the relatives and doctors in an inadequate way. Leading for children are somatic and autonomic symptoms. Thus, in depressions children reveal disturbances of sleep and appetite, listlessness, sluggishness, capriciousness, lost of interest in toys. Younger pupils study worse and develop inhibition. The child becomes shy and sullen, he looks pale and tired. No somatic pathology is revealed. Manic states manifest themselves by excessive activity and behavioural disorders. The child is garrulous, constantly laughs, his face is hyperaemic, the eyes sparkle. Manic states are more noticeable than depressive ones.

In teenagers, clinical manifestations of the disease acquire its typical signs, but along with the feeling of melancholia, sadness and depression adolescents develop a sullen dysphoric mood, conflict relations with their relatives and people of the same age, thoughts about their own inferiority, suicidal acts. It is not in rare cases that manic states in adolescents are expressed through psychopathy-like forms of behaviour: violations of school discipline, alcoholization, offences, aggression. These disorders mask the phase of manic-depressive psychosis.

The involutional age is characterized by prevalence of anxious-agitated or hypochondriacal depressions with a protracted course. Manic states occur less frequently and are notable for complacency, fussiness and unproductiveness.

The course of manic-depressive psychosis may be various. Sometimes there is a regular alternation of the manic and depressive phases separated by light gaps without any morbid symptoms (the bipolar course). In other cases one phase turns into the other one, and the latter is followed by a light gap. At last, instead of the consecutive alternation of the phases, any of them may be repeated after a light gap (the monopolar recurrent course). The prognosis in each particular attack is favourable, no changes in the personality take place and the patient returns to his previous labour.

Manic-depressive psychosis should be differentiated from the schizoaffective form of schizophrenia. Unlike manic-depressive psychosis, schizophrenia is typically characterized by paralogic and splitting thinking, autism, emotional impoverishment, personality changes after the return from psychosis.

In somatogenic, infectious and organic psychoses the patients are asthenic, easily get impoverished, often have syndromes of disturbances of consciousness and intellectual-mnemonic disorders. Unlike endogenous depression, reactive one develops after psychotraumatizing factors, they find their reflection in the patients' sufferings. Endogenous depression is often seasonal, during its attacks there are daily fluctuations in the mood (the depression is more expressed in the morning hours, by the evening the mood becomes better). Presence of the seasonal character in its appearance, daily fluctuations, symptoms of sympathicotonia (Protopopov's triad), absence of any personality changes even after numerous attacks of the illness testify in favour of manic-

depressive psychosis.

Etiology and pathogenesis. A bipolar affective psychosis belongs to diseases of unclear etiology, where hereditary aggravation is a predisposing factor. Thus, in case of one parent having the bipolar form of the disease, the child's risk to fall ill is 27 %, with two ill parents the risk of developing affective disorders in their children increases up to 50-70 %.

V.P. Protopopov and his disciples' works are devoted to the study of the pathogenesis of manic-depressive psychosis. Protopopov V.P. attributed the mechanisms of the disease development to some pathology in the thalamohypothalamic areas of the diencephalon, where the central autonomic apparatus playing an important part in manifestations of affective life is located. He believed that the most typical for manic-depressive psychosis is a complex of symptoms united under the name of the sympathicotonic syndrome: tachycardia, dilatation of the pupils, spastic constipations, a loss of weight, dryness of the skin, an increase of blood pressure, a high level of sugar level in blood. He related all these changes to the central mechanisms and put down to a higher excitability of the hypothalamic region.

A significant part in the pathogenesis of manic-depressive psychosis is played by synaptic transmission disturbances in the system of neurons of the hypothalamus and other basal areas of the brain caused by a change in the neuromediated activity (noradrenaline, serotonin). Thus, the catecholamine hypothesis proceeds from the fact, that depression is connected with a functional deficit of one or several catecholamine neurotransmitters on certain synapses, while mania is connected with the functional abundance of these amines.

On the whole, the ***prognosis*** in a bipolar affective psychosis belongs is favourable. But in cases of a long-term course with phases having some psychotic symptoms, difficulties of the social character develop and the prognosis becomes worse. Assessing the prognosis, one should take into consideration the age of the illness onset and clinical manifestations of the first phase. Recovery is hardly probable with the bipolar type of the illness. If monopolar depressions begin early, the rate of phases at an old age reduces. With an early onset of monopolar mania, an absolute recovery may take place at the age of 50-60. With respect to the general course of manic-depressive psychosis, it is impossible to make any absolutely reliable predictions for every case. Patients suffering manic-depressive psychosis often develop somatic diseases, such as hypertensive disease and diabetes, which worsen the prognosis too.

Treatment and prophylaxis. A bipolar affective psychosis is treated using biological therapy combined with psychotherapy and social therapy. As a rule, the treatment should be provided under inpatient conditions in view of suicidal tendencies of depressive patients or inadequate behavior of maniac ones. Prior to his admittance to mental hospital, it is necessary to provide the patient, his relatives or other people with continuous care and supervision. They should be explained a possibility of attempting suicide.

Antidepressants

Antidepressants are the treatment of choice for a vast majority of depressive episodes. Some of the commonly used antidepressants with their usual range of therapeutic dosage:

No	Generic Name	Usual Therapeutic Range (mg/day)
1.	Agomelatin	25-50
2.	Amitriptyline	75-300
3.	Amoxapine	150-300
4.	Bupropion	150-450
5.	Citalopram	10-40
6.	Clomipramine	75-250
7.	Doxepine	75-300
8.	Dosulepin/Dotheipin	75-150
9.	Duloxetine	30-120
10.	Escitalopram	10-20
11.	Fluoxetine	20-60
12.	Fluvoxamine	50-200
13.	Imipramine	75-300
14.	Lofepramine	140-210
15.	Mianserin	30-120
16.	Mirtazapine	15-45
17.	Moclobemide	300-600
18.	Nortriptyline	150-300
19.	Paroxetine	10-40
20.	Reboxetine	10-1
21.	Sertraline	50-200
22.	Tianeptin	37.5
23.	Trazodone	300-600
24.	Venlafaxine	75-375

An individualised choice has to be made in each patient, keeping these various factors in mind.

It should be remembered that it may take up to 3 weeks before any appreciable response may be noticed. Before stopping or changing a drug, the particular drug should be given in a therapeutically adequate dose for at least 6 weeks.

For the first, uncomplicated, depressive episode, the patient should receive full therapeutic dose of the chosen antidepressant for a period of 6-9 months, after achieving full remission. It is wise to taper the antidepressant medication, when the treatment is to be stopped after the continuation phase.

Electroconvulsive Therapy (ECT)

The indications for ECT in depression include:

1. Severe depression with suicidal risk.
2. Severe depression with stupor, severe psychomotor retardation, or somatic syndrome.
3. Severe treatment refractory depression.
4. Delusional depression (psychotic features).
5. Presence of significant antidepressant side effects or intolerance to drugs.

Severe depression with suicidal risk is the first and foremost indication for use of ECT. The prompt use of ECT can be life-saving in such a situation.

The response is usually rapid, resulting in a marked improvement. In most clinical situations, usually 6-8 ECTs are needed, given three times a week. When six ECTs are administered, the usual pattern is three ECTs in the first week, two in the second week and one in the third week.

However, improvement is not sustained after stopping the ECTs. Therefore, antidepressants are often needed along with ECTs, in order to maintain the improvement achieved. The safety of the ECT procedure has now been well-established.

ECT can also be used for acute manic excitement, if it is not adequately responding to anti psychotics and mood stabilizers.

Lithium (Li)

Lithium has traditionally been the drug of choice for the treatment of manic episode (acute phase) as well as for prevention of further episodes in bipolar mood disorder. It has also been used in treatment of depression with less success.

There is usually a 1-2 week lag period before any appreciable response is observed. So, for treatment of acute manic episode, antipsychotics are usually administered along with lithium, in order to provide cover for the first few weeks.

The usual therapeutic dose range is 900-1500 mg of lithium carbonate per day. Lithium treatment needs to be closely monitored by repeated blood levels, as the difference between the therapeutic and lethal blood levels is not very wide (narrow therapeutic index).

Therapeutic blood lithium = 0.8-1.2 mEq/L

Prophylactic blood lithium = 0.6-1.2 mEq/L

A blood lithium level of >2.0 mEq/L is often associated with toxicity, while a level of more than 2.5-3.0 mEq/L may be lethal.

Although lithium is indicated for therapeutic use in all manic episodes, the preventive use is best in usually those patients with bipolar disorder, in whom the frequency of episodes is 1-3 per year or 2-5 per two years.

The common acute toxic symptoms of lithium are neurological while the common chronic side-effects are nephrological and endocrinal (usually hypothyroidism).

The important investigations before starting lithium therapy include a complete general physical examination, full blood counts, ECG, urine routine examination (with/without 24 hour urine volume), renal function tests and thyroid function tests.

Antipsychotics

Antipsychotics are an important adjunct in the treatment of mood disorder. The commonly used drugs include risperidone, olanzapine, quetiapine, haloperidol, and aripiprazole. It is customary to use the atypical antipsychotics first, before considering the older typical antipsychotics.

Some of the indications include:

1. Acute manic episode

- Along with mood stabilisers for the first few weeks, before the effect of mood stabilisers becomes apparent.

- Where mood stabilisers are not effective, not indicated, or have significant side-effects.

- Given parenterally (IM or IV) for emergency treatment of mania.
- Recently, there has been some early evidence that atypical antipsychotics (e.g. olanzapine) might have some mood stabilising properties.

2. Delusional depression

As stated above, antipsychotics are important adjuncts in the treatment of delusional depression. Once again, it is customary to use atypical antipsychotics such as olanzapine, quetiapine, risperidone, and ziprasidone first, although any antipsychotic can be used.

3. Bipolar depression

There is recent evidence that quetiapine has antidepressant efficacy in bipolar depression.

4. Maintenance or prophylactic treatment in bipolar disorder

Recent evidence shows that several atypical antipsychotics such as olanzapine, quetiapine and aripiprazole can be successfully used in the maintenance treatment of bipolar disorder.

Other Mood Stabilisers

The other mood stabilisers which are used in the treatment of bipolar mood disorders include:

1. Sodium valproate

- For acute treatment of mania and prevention of bipolar mood disorder.
- Particularly useful in those patients who are refractory to lithium.
- The dose range is usually 1000-3000 mg/day (the therapeutic blood levels are 50-125 mg/ml).
- It has a faster onset of action than lithium, therefore, it can be used in acute treatment of mania effectively.

2. Carbamazepine and Oxcarbazepine

- For acute treatment of mania and prevention of bipolar mood disorder.
- Particularly useful in those patients who are refractory to lithium and valproate.
- Particularly effective when EEG is abnormal (although this is not necessary for the use of carbamazepine).
- The dose range of carbamazepine is 600-1600 mg/ day (the therapeutic blood levels are 4-12 mg/ml).
- The use of carbamazepine in treatment of bipolar disorder has recently declined, partly due to its potential for drug interactions.
- Oxcarbazepine has a narrow evidence base and its use in bipolar disorder is quite recent.

3. Benzodiazepines

Lorazepam (IV and orally) and clonazepam are used for the treatment of manic episode alone rarely; however, they have been used more often as adjuvants to antipsychotics.

4. Lamotrigine is particularly effective for bipolar depression and is recommended by several guidelines.

5. T3 and T4 as adjuncts for the treatment of rapid cycling mood disorder and resistant depression.

Other Treatments

Psychosurgery is an extremely rarely used method of treatment and is resorted to only in exceptional circumstances.

In depressive episode, which is either chronic or persistently recurrent with a limited or absent response to other modes of treatment, one of the following procedures may very rarely be performed:

1. Stereotactic subcaudate tractotomy, or
2. Stereotactic limbic leucotomy.

In carefully selected patients, the results are reported to be satisfactory. However, in the current day and age, psychosurgery is hardly ever considered in routine clinical practice.

Prophylaxis of relapses. Preventive therapy with lithium salts is effective for maniac attacks, and rarer for depressive ones. It begins with small doses of 300-600 mg/day, increasing them up to 900-1200 mg/day. Lithium concentration in blood should be 0.6-0.8 mM/l. Application of tricyclic antidepressants for supportive therapy and prevention is more expedient in monopolar depressions. In recent years with prophylactic purposes some anticonvulsants have been used: Finlepsin (carbamazepine), Depakine, Convuleks. An important part in preventing the illness is played by psychotherapy (supportive, cognitive, interpersonal, group ones), sanitary-educational work, genetic consulting, a healthy way of life.

Control questions:

1. Clinical features of the BAR depressive phase:

2. Clinical features of the BAR manic phase:

3. The principles of treatment of affective psychoses:

4. Main clinical manifestation of schizophrenia:

5.Principals of treatment of schizofrenia:

Tests questions:

1. Male, 30 years old, many years suffers from mental illness. On the background of prolonged insomnia he suffer from fears, thoughts of killing himself, tried to hang himself. The mood is markedly reduced, refuse from treatment. What actions are most appropriate for the prevention of patient suicide?

- A. Psychotherapeutic conversation
- B. Hospitalization in neurological department
- C. Outpatient treatment
- D. Hospitalization in a psychiatric hospital
- E. Strict supervision at home

2.The patient,23 years old, an engineer, was hospitalized in a psychiatric hospital. 2-3 weeks ago began to notice that some force is headed by the thoughts, feelings and actions. She suspects that it is subjected to hypnosis her classmate, whom she had not seen for several years. In my head, "there was" the voice of a friend. Periodically experienced influxes thoughts of others when your own mind "stayed", his own thoughts, "stop." In the clinic, under the influence of treatment, gradually disappeared described the painful events, there was a critical attitude towards them. What activities relapse prevention can be considered the most effective?

- A. Leave the work
- B. Avoid meeting with acquaintances that appear in the painful experiences
- C. Take neuroleptic therapy
- D. Conduct psychotherapy aimed at the patient reassurance
- E. Adhere to certain diets

3. In the emergency department of psychiatric hospital delivered a patient M. excited in recent days, verbose, sang at work, read poems, give "sensible guidance" of the enterprise administration. On examination: enhancing of mood, interrupted the doctor, joking, smiling. He talks quickly, in a hoarse voice, often slide from one topic to another, rhyming words. He tends to a reassessment of its features and capabilities. He considers himself "a remarkable specialist" master with "golden hands", "the first specialist of the state." He asked permission to "sing something" and begins to loudly sing, dance. Determine the psychopathological syndrome.

CLASS 9.

INFANTILE AUTISM. CLINICAL MANIFESTATIONS. TREATMENT AND REHABILITATION OF PATIENTS. HYPERKINETIC DISORDER IN CHILDREN AND TEENS. TREATMENT AND REHABILITATION OF PATIENTS WITH DISORDERS OF SOCIAL BEHAVIOR. MEDICAL AND PSYCHOLOGICAL CORRECTION.

Infantile autism

The children, incapable of any speech and affective contacts with their associates, were first described in 1943 by an American psychiatrist Kanner; later the syndrome of an early infantile autism was termed as Kanner's syndrome.

Autistic disorder is the most extensively studied and best understood of the ASDs. "Autistic disorder" is the descriptor used in the DSM, but, in practice, the terms, "autism," "childhood autism," "infantile autism," and "early infantile autism" are used synonymously. The condition is characterized by marked and sustained impairment in social interaction, communication, and restricted or stereotyped patterns of behaviors and interest evident by 3 years of age.

Leo Kanner — was an Austrian-American psychiatrist and physician known for his work related to autism. In 1943, Kanner published a landmark paper, "Autistic Disturbances of Affective Contact" describing 11 children who were highly intelligent but displayed "a powerful desire for aloneness" and "an obsessive insistence on persistent sameness".[1] He later names their condition "early infantile autism."



Hans Asperger was an Austrian pediatrician, medical theorist, and medical professor. He is best known for his early studies on mental disorders, especially in children. His work was largely unnoticed during his lifetime except for a few accolades in Vienna, and his studies on psychological disorders only acquired world renown posthumously. He wrote over 300 publications, mostly concerning a condition he termed autistic psychopathy (AP). There was a resurgence of interest in his work beginning in the 1980s, and due to his earlier work on autism spectrum disorders, Asperger syndrome (AS), was named after him. Both Asperger's original paediatric diagnosis of AP and the eponymous diagnosis of AS that was named after him several decades later have been controversial.





Donald Triplett, the first person with a diagnosis of "autism"

In ICD-10, infantile autism belongs to section “General developmental disorders”, F84. This is a disorder in psychic development, characterized by an autistic form of contacts with the associates, speech and motility disturbances, stereotyped activity and behaviour with a resultant violation of social interactions. The morbidity rate of infantile autism is 4-5 cases per 10,000 children, in boys it being 3-4 times more common than in girls.

Etiology and Pathogenesis

There is no generally accepted theory of the etiology and pathogenesis of infantile autism. There is more reliable evidence in favor of the theory of psychogenesis and the biological one. According to the theory of psychogenesis, children with early autism did not receive any motherly warmth, care and positive emotional atmosphere.

Although Henry Maudsley, in the late 1800s, was the first **psychiatrist** to focus on very young children with mental disorders, it was the psychiatrist Leo Kanner who coined the phrase “early infantile autism” in 1943. Kanner believed that the parents of children with autistic behaviors were emotionally cold and intellectually distant. He coined the term “refrigerator parents” to describe them. His belief that parental personality and behavior played a powerful role in the development of autistic behaviors left a devastating legacy of guilt and self-blame among parents of autistic children that continues to this day. Recent studies are unequivocal, however, in demonstrating that parents of autistic children are no different from parents of healthy children in their personalities or parenting behaviors. In fact, many families with an autistic child also have one or more perfectly healthy children. Because autistic children can be extremely sensitive to change, any change within the family situation can be potentially traumatic to the autistic child. A move, divorce, birth of a sibling or other stressors that occur in the lives of most families may evoke a more extremereaction from an autistic child.

Biological theories attribute this illness to biological factors, an affected development of the brain, chromosomal abnormalities, an organic lesion of the CNS. The following data serve in favour of a specific role of genetic factors: the concordance in monozygotic twins is 36 %, the morbidity rate of infantile autism among siblings is 50 times higher than in the general population.

While there is no single neurological abnormality found in children with autistic disorders, some research using noninvasive **brain** imaging techniques such as **magnetic resonance imaging** (MRI) suggests that certain areas of the brain may be involved. Several of the brain areas being researched are known to control emotion and the

expression of emotion. These areas include the temporal lobe (large lobe of each side of the brain that contains a sensory area associated with hearing), the limbic system, the cerebellum, the frontal lobe, the amygdala, and the brain stem, which regulates homeostasis (body temperature and heart rate). Recent research has focused particularly on the temporal lobe because of the finding that previously healthy people who sustain temporal lobe damage may develop autistic-like symptoms. In animal research, when the temporal lobe is damaged, social behavior declines, and restless, repetitive motor behaviors are common. When measured by MRI, total brain volume appears to be greater for those with autistic disorders. Other neurological factors include lesions to the brain, congenital rubella, undiagnosed and untreated phenylketonuria (PKU), tuberous sclerosis, and **Rett's disorder** (a related condition in which the baby develops in an apparently normal manner through age five months, and then begins to lose communicative and social interaction skills). There is also evidence of a higher proportion of perinatal complications (complications arising around the time of giving birth) among children with autistic symptoms. These complications include maternal bleeding after the first trimester and meconium in the amniotic fluid. (Meconium is a substance that accumulates in the bowel of the developing fetus and is discharged shortly after birth.) Some evidence suggests that the use of medications during pregnancy may be related to the development of autistic symptoms. As newborns, children with autistic behaviors show a higher rate of respiratory illness and anemia than healthy children.

Some professionals believe that autistic disorders may be caused by allergies to particular fungi, viral infections, and various foods. No controlled studies have supported these beliefs, but some parents and professionals report improvement when allergens and/or certain foods are eliminated from the diet. Viral infections of the mother, such as rubella, or of the young child, such as encephalitis, mumps, and measles, occasionally appear to cause autistic disorders. The common childhood immunization series known as MMR (measles, mumps, rubella) has recently come under scrutiny as a possible cause of some autistic conditions.

The onset of the illness occurs before the age of 3 years. In infantile autism, the development of all psychic functions (cognitive, affective, motor, sensory, attention, memory, speech, thinking) is involved.

Classification specifies three diagnostic categories, each with four components, that are used to make a **diagnosis** of autistic disorder. These diagnostic categories include impairments in social interaction, communication, and particular patterns of behavior. More information about the individual diagnostic categories and components follows.

SOCIAL INTERACTION.

Qualitative impairment in social interaction, as demonstrated by at least two of the following:

- impairment in the use of nonverbal behaviors such as eye contact, facial expression, body posture, and gestures used



Fixations of an adult with autism (black line) and a typical viewer (white line) while viewing a conversation on film. (Source: Reprinted, with permission from the American Journal of Psychiatry 159, 909-916. © APA.)

for social interaction

- failure to develop age-appropriate peer relationships
- lack of attempts to share pleasure, activities, interests, or achievements with other people (by failing to bring items of interest to a parent, or pointing out animals or objects, for example)
- inability to respond to social situations or other people's emotions with empathy or a concerned attitude

COMMUNICATION. Qualitative impairments in communicating in at least one of the following four areas:

- lack of, or delay in development of spoken language, without attempts to communicate through alternative means such as gestures or mime
- in individuals who do speak, severe impairment in the ability to initiate or sustain a conversation with others
- repetitive and stereotyped use of language, or use of words in unusual, idiosyncratic ways
- failure to show imaginative play, such as make-believe or social imitative play appropriate to developmental level

BEHAVIOR. Restricted, repetitive, and stereotyped patterns of behavior, interests, and activities, as demonstrated

- by at least one of the following:
- unusual and overly absorbing preoccupation with one or more interests or activities
 - a need for rigid adherence to specific routines or rituals in daily life
 - stereotyped and repetitive motor behaviors using parts of the body such as fingers or hands, or the whole body
 - persistent preoccupation with parts of objects

A behavioural disorder is the main one in infantile autism. The child avoids contacts with children of his age, elder people and relatives. He shuts himself off from the real world, is not able to distinguish animate and inanimate objects. His personal contacts with the parents is devoid of any emotional colour, he does not imitate his associates' behaviour. The children are not afraid to remain by themselves, they would not follow their parents when they begin to walk. Emotional reactions in such children are different: in some of them the mood is even, others are listless, some others are indifferent, rather often dysphoric reactions occur. The children would negatively react to any attempts to change their habitual life stereotype: to change their clothes, food, place of the walk.

The game activity of such children often comes to some monotonous turning over of objects. They either stick to the same games for long periods of time or are rapidly satiated with them. Instead of playing, they would crawl, walk, jump up, sometimes displaying a particular interest to some objects (pieces of iron, toy lorries and cars, ribbons, etc.). The children make monotonous movements: they would swing, jump, repeat the same sounds, show liking for the same objects, manipulations or passions. Their motility is awkward, with rather frequent athetosis-like movements in fingers and

tiptoeing. But at the same time, development of complex and fine movements is possible. Outwardly, the children look estranged, their eyes are as if directed to emptiness, they do not look their associates in the face. The speech of patients with infantile autism is poorly developed, first of all its communicative function, rather often they would not talk at all.

About 50 % of the patients remain mute for the whole life. If, nevertheless, the speech develops, it is not used for personal contacts. The child may recite the same verses, but would not seek the parents' help even when it is necessary. There is no expression and uninterrupted rhythm of the speech, gesticulation. The words are pronounced either correctly or indistinctly, either in a whisper or loudly. Echolalia are common. Personal pronouns are not used for long periods of time. The first words appear by the age of 12-18 months, the first phrases by 24-36 months. But the children would not ask questions and may not reply to any talk addressed to them. Even having a good vocabulary, the children would utter stock phrases, expressing their requests with impersonal orders, such as "to give food", "to cover". The speech has a lot of neologisms. The children are not capable of having dialogues; they would speak to somebody, but not with him.

Children with early autism develop abstract forms of cognition, but they are combined with primitive forms and using of chiefly tactile, olfactory and taste analysers. Reactions to visual and auditory stimulants in infants may be absent, it giving a ground for suspecting deafness and blindness in them.

The clinical picture of infantile autism reaches to its most expressed development by the age of 3-5 years, with a particular combination of complex and primitive reactions in each functional system. By 5-6 years, some manifestations of the illness may smooth down. But the intellectual level does not reach to its average level. In half of the children their IQ is below 50, and only in 1/3 it is over 70. Rather often children with the syndrome of autism are treated as oligophrenics or schizophrenics. But the absence of expressed positive symptoms and progradency, a partial compensation by the age of 6 years make it possible to regard Kanner's syndrome as a developmental disorder of the type of asynchronous dysontogenesis. Besides, schizophrenia is characterized by a later onset and hereditary predisposition to it, rather than to autism.

A majority of children with autism display cognitive impairment. It has been estimated that approximately 75–80% of individuals with autism are classified as intellectually disabled, with about 30% falling in the mild to moderate range and 45% in the severe to profound range. Comparable to typical children, IQ scores are relatively stable and predictive of outcome. Current trends toward earlier detection and intervention, along with increased recognition of higher functioning forms of the disorder, are likely to decrease the proportion of individuals with autism with intellectual disability. On measures of cognitive ability, children with autism tend to display deficits in abstract reasoning, verbal concept formation, and integration skills, as well as tasks involving social insight. In contrast, relative strengths are usually observed in the areas of rote learning and memory skills and visual-spatial problem solving. Individuals with autism display a bias toward perceiving and processing information at the level of local details rather than the global level, or the "big picture"; they have difficulty "seeing the forest for the trees." This processing bias is reflected in greater success on parts-to-whole tasks, rather than tasks requiring them to process a gestalt. Consistent with the prevalent

impairment in language, children with autism also tend to display stronger performance on measures of nonverbal ability relative to verbal ability. A small percentage of individuals with autism, approximately 10%, display savant skills, or specific abilities that dramatically exceed their own broader intellectual ability or the abilities of their typically developing counterparts. These skills may take the form of musical or drawing ability or exceptional feats of memory, such as the ability to name days of the week corresponding to dates several years in. A common isolated strength in children with autism is facility in recoding letters and numbers, or hyperlexia. Children with autism often display disturbances in patterns of sleeping and eating. They may sleep in idiosyncratic patterns with recurrent awakening at night for long periods; among lower functioning individuals, this can present a safety risk as these children are then unsupervised as others in the house remain asleep. Eating disturbances may involve seeking or avoiding particular foods based on texture, color, or smell. Many children with autism resist all but a limited repertoire of foods and refuse to try new foods. Poor affect modulation and displays of emotions inconsistent with contextual events are also seen in autism, including abrupt mood changes and laughing for no apparent reason. Temper tantrums are common, particularly in reaction to demands and unexpected changes in routine. Higher functioning individuals may display intense anxiety in social situations; they may also develop depression in adolescence, resulting from negative social experiences over the years and augmenting insight into their own social limitations.

Patients with autism have a wider range of IQ and reliably lower indices of the comprehension test than those with schizophrenia. In some cases patients may memorize much information, make complex calculations, they preserve musical, mechanical and mathematical abilities.

Becoming adults, 2/3 patients with infantile autism are not able to live independently and have no skills for unaided self-servicing. In mild cases it is possible to achieve some primitive professional adaptation.

Language is usually significantly impaired in individuals with autism. It has historically been estimated that as many as half of individuals with autism never develop functional speech; but this proportion is decreasing due to improved detection and intervention procedures, along with recognition of high-functioning forms of the disorder. Nevertheless, language impairments represent a core phenotypic feature, with delays in the acquisition of language representing the most frequent presenting complaint. Usual patterns of language acquisition (e.g., playing with sounds and babbling) may be reduced in frequency or altogether absent. Children with autism commonly manipulate a parent's hand (as if the hand were a disembodied tool) instead of making more conventional requests. In contrast to children with language impairment alone, children with autism display an apparent reduced drive to communicate and tend not to compensate through nonverbal means, such as gesture or eye contact. When individuals with autism do develop speech, their language is atypical in several respects. They frequently display immediate or delayed echolalia, or repetition of previously heard speech. Immediate echolalia often takes the form of repeating statements or questions uttered to the child and has been considered the child's attempt to "respond" despite lacking comprehension of the verbiage or the ability to formulate an appropriate response. Immediate echolalia is often observed in typical language development as a

tool for acquiring speech; it follows that it is considered a positive predictor for functional language development in children with autism. Delayed echolalia is also common and may manifest as repeating snippets of previous conversations or movie dialog. These utterances may be nonreciprocal and noncommunicative in nature or may be incorporated into functional language. For example, a child might repeat a parent's admonishment aloud every time they become anxious that they have done something wrong or use lines from movie dialog appropriately in real-life situations analogous to the movie scene. The term "stereotyped speech" refers to the application of these rote, scripted speech patterns in this fashion. Because of the rote and inflexible manner in which speech is learned and utilized, children with autism often produced idiosyncratic patterns of speech that are functional but odd. For similar reasons, children with autism often reverse pronouns, commonly referring to themselves in the second person. The syntax and morphology of language are typically intact in individuals with autism who develop speech. However, they have particular difficulty with social uses of language (pragmatics). Thus, humor and sarcasm are often misconstrued as a person with autism may fail to appreciate the speaker's communicative intent and interpret the jest literally. Indeed speech in individuals with autism tends to be excessively concrete, both in terms of production and comprehension. The prosody of individuals with autism is usually inappropriate, with flat intonation and halting pacing, sometimes described as "robotic." Deficits in pragmatic communication, particularly the ability to have a back-and-forth conversation, are prevalent. The language and communicative deficits in autism differ from those characterizing pure language impairments in their focal social difficulties, as well as the severity of language delays.

Asperger's disorder (AD) is currently differentiated from other ASDs by the preservation of linguistic and cognitive abilities despite profound social disability and circumscribed interests. AD is named after an Austrian pediatrician, Hans Asperger. In 1944, at approximately the same time when Leo Kanner described children with "autism" in the United States, Asperger described a group of school-aged boys with intact cognitive and language skills but difficulties with social interaction (Asperger 1944). He called the disorder "autistic personality disorder." Asperger noted poor social integration, reduced nonverbal communication, idiosyncratic verbiage, strong (and often unusual) areas of interest, limited empathy, clumsiness, and behavior problems. Asperger suggested that these difficulties did not emerge before 3 years of age, and he commented on the apparent heritability of the disorder.

Criteria for AD

A. Qualitative impairment in social interaction, as manifested by at least two of the following:

- (1) marked impairment in the use of multiple nonverbal behaviors such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction,
- (2) failure to develop peer relationships appropriate to developmental level,
- (3) a lack of spontaneous seeking to share enjoyment, interests, or achievements with other people (e.g., by a lack of showing, bringing or pointing out objects of interest to other people)
- (4) lack of social or emotional reciprocity

B. Restricted repetitive and stereotyped patterns of behavior, interests, and

activities, as manifested by at least one of the following

(1) delay in or total lack of, the development of spoken language (not accompanied by an attempt to compensate through alternative modes of communication such as gesture or mime)

(2) in individuals with adequate speech, marked impairment in the ability to initiate or sustain a conversation with others

(3) stereotyped and repetitive use of language or idiosyncratic language

(4) lack of varied spontaneous make-believe play or social imitative play appropriate to developmental level

C. The disturbance causes clinically significant impairment in social, occupational, or other important areas of functioning

D. There is no clinically significant general delay in language (e.g., single words used by age 2 years, communicative phrases used by age 3 years).

E. There is no clinically significant delay in cognitive development or in the development of age-appropriate self-help skills, adaptive behavior (other than in social interaction), and curiosity about the environment in childhood.

F. Criteria are not met for another specific Pervasive Developmental Disorder or Schizophrenia.

Rett's disorder (RD), also called Rett's syndrome, is a rare genetic neurodevelopmental disorder that almost invariably affects females. The disorder is characterized by a period of normal development, usually the first 6 months of life, followed by deceleration of head growth, social withdrawal, and a generalized slowing of development. A regressive phase follows, during which previously acquired receptive and expressive language skills are lost. During this period, motor skills, specifically purposeful hand skills, also regress and are replaced by characteristic hand stereotypies of hand-wringing and washing motions. This regression may take place insidiously over a prolonged course or more abruptly in the span of several days. Generally around the age of 3, this regression slows, leaving severe mental retardation and neurological deficits, including spasticity, seizures, and trouble coordinating breathing and eating. Improvements in social engagement are often seen during this plateau. During early puberty, there is generally further deterioration in motor function, with progressive scoliosis and muscle wasting. Children with RD often become wheelchair bound.

Criteria of RD

A. All of the following:

(1) apparently normal prenatal and perinatal development

(2) apparently normal psychomotor development through the first 5 months after birth

(3) normal head circumference at birth

B. Onset of all of the following after the period of normal development:

(1) deceleration of head growth between ages 5 and 48 months

(2) loss of previously acquired purposeful hand skills between ages 5 and 30 months with the subsequent development of stereotyped hand movements (e.g., hand-wringing or hand washing)

(3) loss of social engagement early in the course (although often social interaction develops

later)

(4) appearance of poorly coordinated gait or trunk movements

(5) severely impaired expressive and receptive language development with severe psychomotor retardation

Differential diagnosis of autistic spectrum disorders

Differential diagnosis is the process of distinguishing one disorder from other similar disorders. Because there are currently no medical tests (such as a blood test) to detect autism, the diagnosis is often established by ruling out other disorders.

MENTAL RETARDATION. It is estimated that approximately 40% to 60% of children with autistic disorders show some degree of mental retardation ranging from mild to profound. It is possible for a child to have both conditions. What distinguishes children with mental retardation who do not have autistic symptoms from those who do is evenness of development. Children with mental retardation tend to exhibit a more even level of functioning in all areas, whereas autistic children tend to exhibit extreme variability within areas and between areas. Children with autistic disorders show uneven development in areas such as motor, language, and social skills. A child with autism may have high-level cognitive functioning in one area, but low-level cognitive functioning in another area, for example. Or a child with autism may exhibit delayed cognitive development, but normal motor skills development. For this reason, autism is often referred to as a “spectrum disorder” because of the large spectrum or range of variability in symptoms and functioning. Also, many children with mental retardation relate well to people and enjoy social connection, which is rare for autistic children.

LANGUAGE DISORDER. Children with autistic disorders may appear similar in some ways to children with language disorders. Unlike autistic children, however, children with language disorders have normal responses

CHILDHOOD SCHIZOPHRENIA. Schizophrenia is a disturbance of emotion and thought processes that rarely occurs in young children. When it does, it is characterized by hallucinations and delusions — seeing and hearing things that are not there, for example. These are not symptoms that appear among autistic children.

DEGENERATIVE ORGANIC BRAIN DISORDER. This is an extremely rare condition that may at first appear similar to autistic disorders. In degenerative organic brain disorder, the child begins to develop normally. But over time, speech, language, motor skills and other age-appropriate behaviors disintegrate and do not return. The disintegration is progressive. In children with autistic disorders, some children may begin to develop words and language and then lose them at around eighteen months. However, with appropriate education, these skills can be relearned and surpassed by the autistic child.

The treatment is mainly symptomatic. Autistic disorders cannot be cured, but children who have these disorders can make considerable progress in all areas of life. Much attention is attached to behavior therapy, which stimulates the speech and social development. Neuroleptics, tranquilizers, antidepressants and sedatives are administered for an expressed aggressiveness, autoaggressiveness, hyperactivity and dysphoriae. Very important is psychotherapy, directed at the child himself and his relatives. Depending

upon the level of intellectual function, it is possible for some children with autism to become functioning, semi-independent adults capable of working and enjoy some social relationships. Parenting a child with autism can be extremely challenging, however, and many families find support groups to be helpful. Both medication and psychosocial therapies (therapies that address both psychological and social issues) can help ameliorate troubling symptoms. Education is key for helping these children learn socially acceptable behaviors, decreasing odd mannerisms and behaviors, and increasing appropriate verbal and non-verbal language skills.

Education. Most educational programs for children with autistic disorders involve small, specialized classes with teachers specially trained to work with autistic children. Often, these children are educated in special schools that have extended school years rather than lengthy summer vacations. Research has shown that autistic children need regular, daily structure and routine, and they maintain their skills best when there are not frequent disruptions of their daily school program. One method that has been used extensively both within the classroom and at home is a behavior modification method known as “Applied Behavior Analysis,” or ABA. Specially trained teachers break down large goals into small steps that are taught and repeated until the child masters each one. Slowly, step by step, more appropriate patterns of behavior and communication are formed or “shaped” in this way. Positive reinforcement is used in many forms such as praise, for those children who are motivated by it, time permitted to engage in a favorite activity, or a small favored food item. For ABA to be most effective, parents need to be trained to use these same skills to continue the work at home.

Medications Although no one drug is helpful to children with autistic disorders, several medications are currently used, along with education, to reduce severe temper tantrums and destructive aggression, self-injurious behaviors, hyperactivity, and strange, repetitive behaviors. Medications may also help the autistic child become more receptive to learning and relating to others. Some of the medications commonly used today include risperidone (Risperdal), and haloperidol (Haldol). Although there are side effects associated with these medications, careful dosing and use of other medications to counteract side effects often enable the autistic child to function more effectively.

Non-conventional treatments One non-conventional and experimental treatment for autism is the use of secretin, a hormone produced in the small intestine that stimulates the pancreas to release sodium bicarbonate and other digestive enzymes. Some researchers think that children with autistic disorders do not produce enough of this hormone, and that the lack of sufficient secretin may be the reason why children with autistic disorders suffer so frequently from digestive problems. There are some reports of treating autistic children with secretin that indicate improvement not only in digestion, but in eye contact, alertness, and the ability to learn. Another non-conventional, experimental treatment involves *Candida albicans*, the technical term for common yeast that is found in the human body. Some scientists believe that an overgrowth of this yeast may cause or worsen autism. Some reports indicate that children treated with anti-yeast medications improve in eye contact, social abilities, language skills, concentration, and sleep, and that they show a reduction in aggressive and hyperactive behavior. An additional non-conventional treatment being researched for autism is a nutritional supplement, Vitamin B6. Some experts believe that Vitamin B6 holds promise for

reducing autistic symptoms and helping autistic children progress in all areas. It may be combined with magnesium and the combination appears to have no known side effects. Improvements attributed to these

Hyperkinetic disorder in children and teens.

Treatment and rehabilitation of patients with disorders of social behavior.

Medical and psychological correction.

ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD) – is a developmental disorder characterized by distractibility, hyperactivity, impulsive behaviors, and the inability to remain focused on tasks or activities.

Antisocial personality disorder – Disorder characterized by behavior pattern of disregard for others' rights. People with this disorder often deceive and manipulate, or their behavior might include aggression to people or animals or property destruction, for example. This disorder has also been called sociopathy or psychopathy.

Conduct disorder – A behavioral and emotional disorder of childhood and adolescence in which children display physical aggression and infringe on or violate the rights of others. Youths diagnosed with conduct disorder may set fires, exhibit cruelty toward animals or other children, sexually assault others, or lie and steal for personal gain.

Nervous tic – A repetitive, involuntary action, such as the twitching of a muscle or repeated blinking.

Oppositional defiant disorder – An emotional and behavioral problem of children and adolescents characterized by defiant, hostile, or disobedient behavior that has lasted for longer than six months.

These are mostly disturbances in the effector-volitional sphere manifesting themselves through expressed motor activity, inattention and reduction of volitional qualities.

Within the last decade these disorders were more and more mentioned by doctors, teachers and social workers, since the social significance of this pathology is very great. The main problem of these children consists in their excessive motor activity which is perceived by the majority of their associates as hooliganism. It is extremely important for paediatricians and specialists in juvenile diseases to professionally assess these deviations and begin medical-corrective measures in time.

Literature data about the morbidity rate of hyperkinetic disorders greatly vary from 1-6 % of children before the age of puberty to 4-12 % of young pupils. The disorder is significantly more common for boys, a lot of them being adopted.

Classification of clinical manifestations. By now, no classification of hyperkinetic disorders has been devised, since their clinical manifestations are of the same type, similar and united into one syndrome by the same pathogenesis. On the whole, the symptoms are characterized by some restless activity, impulsiveness, which sometimes achieves destructive aggressiveness, and absent-mindedness. The onset of a hyperkinetic disorder is during early development. Rather often the mothers of sick children retrospectively notice hypermotility of their fetus. At the age of infancy, such children are restless, hyperdynamic, their sleep is short-time and poor, their threshold of excitement to sensor stimulants is low. Finally, the hyperkinetic disorder syndrome

becomes evident by the age of 6-7 years, when the child already has to meet certain demands of behavior stereotypes (to sit till the end of a class, to fulfill a task, to keep silence). Typical for a hyperkinetic disorder are impulsiveness and rashness, but the acts are made unpremeditatedly, the patients are not able to prognosticate final results. The sense of carefulness is absent even in dangerous situations. One of these impulsiveness manifestations is aggressiveness, manifesting itself in 75 % of sick children.

A deficit of attention displays itself through high distractibility, unsteadiness, impatience, inability to finish a task. The children are not able to keep their seat, they would jump up, pay no attention to remarks made by adults, run, jump irrespective of the situation, aggressively investigate their surroundings, easily meet with accidents.

ADHD. The definitions of ADHD and hyperkinetic disorder are based on maladaptive high levels of impulsivity, hyperactivity and inattention. They are all based on observations about how children behave: 'impulsivity' signifies premature and thoughtless actions; 'hyperactivity' a restless and shifting excess of movement; and 'inattention' is a disorganized style preventing sustained effort. All are shown by individual children to different extents, and are influenced by context as well as by the constitution of the person.

Course. One of the diagnostic criteria of a hyperkinetic disorder is its early onset (before the age of 5 years). The symptoms are more evident in pupils, and, unlike in boys, hyperdynamia in girls is less expressed, but anxiety and mood disturbances prevail. Clinical manifestations may disappear in the beginning of the period of puberty.

Onset. The core behaviors of ADHD are typically present from before the age of 7 years, but at all ages presentation as a problem is very variable. Mild forms need not be impairing at all. Extreme forms are considered to be harmful to the individual's development in most cultures, but there are cultural differences in the level of activity and inattention that is regarded as a problem. While both teachers and parents can find it hard to deal with or live with a hyperactive child, their tolerance and ability to cope may determine whether the hyperactivity is presented as a problem. Children with hyperactivity rarely ask for help themselves. Inattention without hyperactivity often is not present as a problem even though an inattentive child may have a marked cognitive impairment. The presentation to the clinician therefore depends on a complex blend of the skills and tolerance of adults surrounding the child and the qualities of the children themselves. The core problems of ADHD and the associated features can persist over time and impair development in children. Several studies have followed diagnosed schoolchildren over periods of 4 to 14 years; all have found that they tend to show, by comparison with people of the same age who have not had mental health problems, persistence of hyperactivity and inattention, poor school achievement and a higher rate of disruptive behavior disorders. The risk of later maladjustment also affects children not referred to clinics and those not treated at all. Longitudinal population studies have shown that hyperactive-impulsive behavior is a risk for several kinds of adolescent maladjustment. Lack of friends, work and constructive leisure activities are prominent and affect the+ quality of life. Severe levels of hyperactivity and impulsivity also make children more likely to develop an antisocial adjustment and more likely to show personality dysfunction or substance misuse in later adolescence and adult life.

Although ADHD symptoms persist in the majority of cases, it is important to

remember that many young people with ADHD will make a good adjustment to adulthood and be free of mental health problems. A good outcome may be more likely when the main problem is inattention rather than hyperactivity-impulsivity, when antisocial conduct does not develop, and when relationships with family members and other children remain warm. More research is needed on the influences on eventual outcome, and should include enquiry about the possible benefits (and risks) of early diagnosis and treatment.

Age-specific peculiarities. In juveniles, the motor disinhibition decreases, but the hyperkinetic disorder is covered with layers of bad behavior and difficulties in studies. Adults are characterized by an asocial mode of life, alcoholization, and abuse of narcotic drugs. Having begun in childhood, hyperkinetic disorders are preserved by the juvenile age in 50 %, and by the adult age in 30 %; they are characterized by an unfavourable course and an antisocial direction of the personality.

Etiology and pathogenesis. Infections and intoxications at the perinatal period and injuries in the young childhood are etiological factors of hyperkinetic disorders. No genetic predisposition to these disorders can be excluded. Their pathogenesis is based on neurocirculatory and neuroendocrine disorders, which result from affecting factors and contribute to abnormal maturation of certain cerebral structures causing their dysregulation.

ICD-10 criteria for hyperkinetic disorders

1. Inattention – At least six symptoms of attention have persisted for at least 6 months, to a degree that is maladaptive and inconsistent with the developmental level of the child:

Often fails to give close attention to details, or makes careless errors in school work, work or other activities

Often fails to sustain attention in tasks or play activities

Often appears not to listen to what is being said to him or her

Often fails to follow through on instructions or to finish school work, chores or duties in the workplace (not because of oppositional behaviour or failure to understand instructions)

Is often impaired in organising tasks and activities

Often avoids or strongly dislikes tasks, such as homework, that require sustained mental effort

Often loses things necessary for certain tasks and activities, such as school assignments, pencils, books, toys or tools

Is often easily distracted by external stimuli

Is often forgetful in the course of daily activities

2. Hyperactivity – At least three symptoms of hyperactivity have persisted for at least 6 months, to a degree that is maladaptive and inconsistent with the developmental level of the child:

Often fidgets with hands or feet or squirms on seat

Often leaves seat in classroom or in other situations in which remaining seated is expected

Often runs about or climbs excessively in situations in which it is inappropriate (in adolescents or adults, only feelings of restlessness may be present)

Is often unduly noisy in playing or has difficulty in engaging quietly in leisure activities

Often exhibits a persistent pattern of excessive motor activity that is not substantially modified by social context or demands

3. Impulsivity – At least one of the following symptoms of impulsivity has persisted for at least 6 months, to a degree that is maladaptive and inconsistent with the developmental level of the child:

Often blurts out answers before questions have been completed

Often fails to wait in lines or a wait turns in games or group situations

Often interrupts or intrudes on others (for example, butts into others' conversations or games)

Often talks excessively without appropriate response to social constraints

4. Onset of the disorder is no later than the age of 7 years.

5. Pervasiveness – The criteria should be met for more than a single situation, for example, the combination of inattention and hyperactivity should be present both at home and at school, or at both school and another setting where children are observed, such as a clinic. (Evidence for cross-situationality will ordinarily require information from more than one source; parental reports about class-room behavior, for instance, are unlikely to be sufficient.)

6. The symptoms in 1 and 3 cause clinically significant distress or impairment in social, academic or occupational functioning

Treatment. The therapy of hyperkinetic disorders should proceed from the principles of the treatment duration, complex character, and individuality, including drug treatment, psychotherapy and social-pedagogical methods. It is possible to use such drugs of choice as psychostimulants, mainly amphetamines: dexamphetamine, Ritalin (methylphenidate), pemoline (Cylert). These medicines improve concentration, reduce motor activity and impulsiveness. Besides, for some cases, antidepressants (melipramine, fluoxetine) and antiparoxysmal drugs (carbamazepine) are indicated, sometimes neuroleptics (Neuleptil, sonapax) are prescribed.

For children who do not respond well to stimulant therapy, and for children who clearly suffer from depression as well as ADHD, tricycles antidepressants (a group of drugs used to treat depression) may be recommended. Examples of these antidepressants include desipramine (Norpramin, Pertofane) and amitriptyline (Elavil). Reported side effects of these drugs include persistent dry mouth, sedation, disorientation, and cardiac arrhythmia (an abnormal heart rate), particularly with desipramine. Other medications prescribed for ADHD therapy include bupropion (Wellbutrin), an antidepressant; fluoxetine (Prozac), an SSRI antidepressant (a group of medications used to treat depression by directing the flow of a neurotransmitter called serotonin); and carbamazepine (Tegretol, Atretol), an antiseizure drug. Clonidine (Catapres), a medication used to treat high blood pressure, has also been used to control aggression and hyperactivity in some ADHD children, although it should not be used with Ritalin. Because

Psychotherapy should be provided both individually (separately with the child and the parents) and in the family, with use of methods of psychological-pedagogical correction.



A special education teacher helps a student with attention-deficit/hyperactivity disorder with his math assignment. (*Photo Researchers, Inc. Reproduced by permission.*)

GALE ENCYCLOPEDIA OF MENTAL DISORDERS

Behavior modification therapy uses a reward system to reinforce good behavior and task completion and can be implemented both in the classroom and at home. A tangible reward such as a sticker may be given to the child every time he completes a task or behaves in an acceptable manner. A chart may be used to display the stickers and visually illustrate the child's progress. When a certain number of stickers are collected, the child may trade them in for a bigger reward such as a trip to the zoo or a day at the beach. The reward system stays in place until the good behavior becomes ingrained. A variation of this technique, cognitive-behavioral therapy, may work for some children to decrease impulsive behavior by getting the child to recognize the connection between thoughts and behavior, and to change behavior by changing negative thinking patterns. Individual psychotherapy can help ADHD child build self-esteem, provide a place to discuss worries and anxieties, and help him or her to gain insight into behavior and feelings. Family therapy may also be beneficial in helping family members develop coping skills and in working through feelings of guilt or anger parents may be experiencing. ADHD children perform better within a familiar, consistent, and structured routine with positive reinforcements for good behavior and real consequences for bad behavior. Family, friends, and caretakers should all be educated on the special needs and behaviors of the ADHD child so that they can act consistently. Communication between parents and teachers is especially critical to ensuring an ADHD child has an appropriate learning environment.

Alternative treatment

A number of alternative treatments exist for ADHD. Although there is a lack of controlled studies to prove their efficacy, proponents report that they are successful in controlling symptoms in some ADHD patients. Some of the more popular alternative treatments include:

- EEG (electroencephalograph) biofeedback. By measuring brainwave activity and teaching the ADHD patient which type of brainwave is associated with attention, EEG biofeedback attempts to train patients to generate the desired brainwave activity.

- Limited sugar intake. However, data indicate that this method does not actually reduce symptoms.

- Relaxation training.

Control questions:

1. Definition of juvenile (infantile) Autism.

2. Clinical manifestations of infantile autism.

3. Treatment of infantile autism. The principles of correction and rehabilitation:

4. Differential diagnosis of ADHD:

5. The main principles of ADHDs treatment:

Tests questions:

1. Boy 5,5 years unproductive contact, does not look in the eye. His tongue-tied, fragmentation, replete with echolalia. Characterized by stereotype behavior not only in simple motor acts, but also in more complex things (drinking only tea, refused to wear clothing that is different in color from the usual). If any of the usual routine for him is disrupted becomes a motor disinhibition, screaming, grimacing, did not respond for the comments. What should include a range of therapeutic interventions

- A. Antidepressants and rational psychotherapy
- B. Nootrops and group therapy
- C. Antipsychotics and exclusion of meat products for from the diet
- D. Antipsychotics and exclusion of baby milk products from the diet
- E. Anticonvulsants and hypnotherapy

2. The teenager 13 years. From a broken family - parent's alcoholics often beaten child, do not care about him. Last year became aggressive towards all others, out of the house more than a day, drink alcohol, inhaled vapors of glue. He was seen in the theft, marked drives to the police. A presumptive diagnosis:

- A. Conduct disorder, limit the scope of the family.
- B. Notsocialized conducts disorder.
- C. Socialized conduct disorder.
- D. Challenging oppositional conduct disorder.
- E. Mentally healthy.

3. Girl 5 years, after 2.5 years stops to respond to the request speech, to talk, was surveyed by ENT specialist - hearing in the normal range. Contact formal, does not look in the eye. Toys and play activities are not interested. Phrasal speech does not use, if she needs something gestures can show what she wants. Commits stereotyped movements, frequent echolalia. She loves to lay out puzzles. What type of diet therapy should be used in complex therapeutic interventions?

- A. Exclude from the diet of a child meat products
- B. Exclude from the diet a child milk products and some cereals (wheat, rye, oats and barley)
- C. To exclude from the child's diet fiber
- D. Exclude from the diet of a child citrus
- E. Exclude from the diet of a child chocolate

4. Boy 4.5 years does not communicate with their peers. Tied to his mother, not paying attention to other family members. It is poorly developed. He says about himself in the third person. Shows a peculiar interest to the clock, a long time considering them without understanding what they are being shown. He wears the same suit. When trying to change it, resists. Only falls asleep in a chair where the mother carries him to bed.

Determine the diagnosis.

- A. Schizophrenia
- B. Oligophrenia

CLASS 10.

TREATMENT OF MENTAL DISEASES. PSYCHOEDUCATION AND REHABILITATION OF MENTAL PATIENTS.

The treatment of mental diseases is divided into kinds according to the object pursued and methods used. Like in other medical fields, depending upon its purpose, the following types therapy are isolated: *etiological, pathogenetic, symptomatic, general health-improving*, etc. Disintoxication in intoxication psychoses is an example of etiological therapy in psychiatry. Shock therapy in some forms of schizophrenia may serve as an example of pathogenetic therapy, i.e. the one directed at interfering in the mechanism of the illness development and interrupting its course. Symptomatic treatment is used for removing some distressing or dangerous manifestations of an illness. For instance, in order to rapidly remove acute anxiety, anticonvulsants (tizercine, Seduxen, phenazepam, etc.) are employed.

It is customary in psychiatry to designate specific kinds of therapy depending upon their certain tasks.

Controlling therapy is directed at a rapid removal of severe acute manifestations of mental disorders (excitement, hallucinosis, etc.). Usual for such cases is parenteral administration of relatively large doses of psychoactive drugs, neuroleptics in particular. As soon as the acute manifestations are removed, the doses are reduced, the drugs are taken orally, and other medicines are used with a slower but more selective effect for certain disorders. Interruption of alcoholic delirium (“delirium tremens”) with intravenous infusions of Sibazone (Relanium) serves as an example of controlling therapy.

Maintenance therapy is employed when an effect (from actual recovery to some improvement) has been achieved, but an absolute discontinuation of the treatment threatens with a relapse or aggravation of the state. Usually, reduced doses of effective drug preparations are used or potent medicines are substituted for with milder ones. A sudden discontinuation of maintenance therapy is often accompanied by the “withdrawal reaction”, the “withdrawal syndrome”, manifesting itself by both an aggravation of the mental state and autonomic disorders. Following discontinuation of maintenance therapy, relapses often occur not immediately, but 2-3 weeks later. Maintenance therapy is given during many months and years. In order to save the patient from a necessity to take medicines several times a day and to be sure that it regularly comes to the organism, long-acting drugs (“depot preparations”) are used. Intramuscular injections of such medicines are given once during 1-3 weeks (Moditen-depot, IMAP, etc.). Also, there are long-delayed oral drugs (pimozide, etc.). It is enough to take them once a day, as their absorption is slow. A shortcoming of long-acting drugs, particularly for intramuscular administration, consists in an impossibility, if necessary, to rapidly discontinue the treatment, as well as a necessity to continue oral taking of correctors.

Corrective therapy, or employment of special medicines, is directed at removal of distressing side effects of psychoactive drugs (mainly in the form of extrapyramidal disorders). Most of these drug preparations, especially haloperidol, moditen, clopixonol, cause parkinsonism-like disorders: tremor of muscles, constraint, etc., as well as fits of cramps in some muscles (those of the eyeballs, tongue, neck, etc.). To remove these

disorders, a systemic oral taking of antiparkinsonian drugs are administered, most often this is cyclodole (Artane, Romparkin, Parkopan).

Preventive, or anti-relapse, therapy is essentially a variety of the maintenance one, but it is given against a background of recovery or good remission. A break in the therapy does not always entail an immediate relapse. As an example, it is possible to mention treatment with lithium salts for manic-depressive psychosis; their regular use prevents development of the next phase.

The struggle with therapeutic resistance, i.e. tolerance to a drug, addiction, which oftener develops in cases of chronic mental disorders and long-term treatment with psychoactive medicines, includes different special ways intended for augmenting effects of drugs or increasing the organism's sensitivity to them. These ways include aforethought breaks in the treatment with the resultant "withdrawal syndrome", electroshock therapy, etc.

In compliance with the methods employed, the treatment of mental disorders is divided into *drug therapy*, *psychotherapy*, as well as *social therapy* and *rehabilitation* as a system of measures for restoration (full or partial) of the patient's social status. The treatment of every patients is usually complex, including methods of all the kinds of therapy, prevention of complications and increase of the organism's defensive strength.

Drug therapy includes use of all the medicines, psychoactive ones being among them, as well as hormones, enzymatic drug preparations, vitamins and other biologically active substances.

Treatment with psychoactive medicines. At present, this group of drugs is the main method in the therapy of mental disorders. The group is usually divided into *neuroleptics*, *tranquillizers*, *antidepressants*, *thymostabilizers*, *psychostimulants* and *nootrops*. *Psychodysleptics* (*psychotomimetics*, *hallucinogens* and "psychodelic" drugs) belong to psychoactive medicines too, but they are not used for treatment in our country.

Neuroleptics. These psychoactive drugs are most frequently administered for treating psychoses, but their small doses are used in nonpsychotic (neurotic, psychopathic) disorders. Neuroleptics suppress the patient's excited mental activity and produce the antipsychotic (removal of delusions and hallucinations), antiaggressive (weakening of psychomotor activity), psychosedative (impoverishment of emotions and feelings) and anxiolytic (removal of pathologic anxiety) effects, whose mechanisms are connected with suppression of adren- and dopaminergic receptors in the central interneuronal synapses. An influence on these systems also explains a number of other effects peculiar to neuroleptics (anticonvulsant, myorelaxant, potentiating, hypothermal, hypotensive, antiemetic, etc.), including side ones (extrapyramidal disorders).

The group of neuroleptics consists of:

- I. Phenothiazine derivatives.
 - A. Aliphatic line (aminazine, propazine, methotrimeprazine).
 - B. Piperazine line (zuclopentixol, flupentixol, meterazine, perphenazine, frenolon, trifluoperazine, quetiapine, fluphenazine, fluphenazine-decanoate).
 - C. Piperidine line (periciazine, thioridazine).
- II. Thioxanthene derivatives (chlorprothixene).
- III. Butyrophen derivatives (droperidol, haloperidol, trifluperidol).
- IV. Diphenylbutylpiperidine derivatives (flushperilen, pimozide).

V. Dibenzodiazepine derivatives (azaleptine, olanzapine).

VI. Indole derivatives (carbidine).

VII. Substituted benzamides (sulpiride, thiapride).

VIII. Derivatives of pyrimidine and imidazolidinon (risperidone, sertindole).

By the character of their effect on psychotic symptoms, 3 main groups of neuroleptics are isolated: 1) neuroleptics *with primary sedative effect* (aminazine, tizercine, Truxal); 2) neuroleptics *with general antipsychotic effect* (aminazine, trifluoperazine, haloperidol); 3) neuroleptics *with antipsychotic effect accompanied by stimulating component* (meterazine, perphenazine, frenolon, sonapax, Neuleptil, chlorprothixene, eglonil).

Depending upon the expressiveness of extrapyramidal disorders, all neuroleptics are subdivided into “*typical*” (I, II, III) and “*atypical*” (IV, V, VI, VII, VIII) ones. With usual clinical dosages, “*atypical*” antipsychotic drugs do not cause extrapyramidal side effects. Characteristic of “*atypical*” neuroleptics (azaleptin, olanzapine, rispolept, seroquel) is a less expressed relation to dopamine D2 receptors, it is their blocking that results in extrapyramidal effects. They have a more expressed relation to D1 receptors, it ensuring control over productive symptoms, and to serotonin 5HT2 receptors, binding with whom may provide efficacy with respect to negative symptoms in schizophrenia.

Aminazine (Chlorpromazine) is the first psychoactive drug, with which psychopharmacology started to develop. Its antipsychotic and potent psychosedative effects were discovered by French psychiatrists J. Deley and P. Deniker in 1952. Before that time chlorpromazine was used in veterinary medicine as an anthelmintic. In order to remove psychomotor excitement, it is administered intramuscularly. It may cause collapse-like states. Its long-term use contributes to the development of depressions, parkinsonism-like disorders, thromboembolism. Jaundice and agranulocytosis are rare. Contraindications include diseases of the liver, kidneys, heart and haemopoietic organs, a disposition to the formation of thrombi. Aminazine may give rise to allergic reactions, and not only in the treated people, but even in the staff who gave injections.

Haloperidol is indicated for both acute and chronic mental disorders; it produces both antipsychotic and potent sedative effects. It serves for controlling different kinds of excitement (maniac, catatonic, delusional, etc.). In these cases it is injected intramuscularly or by drops intravenously. It is more effective in hallucinoses, than trifluoperazine. Chronic disorders are treated with drops and tablets. Haloperidol causes expressed extrapyramidal disorders. Fits of convulsive cramps of the tongue, neck, eyes and face may occur. Only small doses (up to 1-2 mg/day) can be used without benzhexol hydrochloride. Haloperidol is contraindicated in organic lesions of the brain, when parkinsonism-like disorders are particularly frequent and severe, and even resist any correction with benzhexol hydrochloride. In cases of solar irradiation, dermatitides may develop.

Fluphenazine (Moditen depot) (IMAP – intramuscular antipsychotic) is the most common as a long-acting drug (fluphenazine-decanoate, Moditen-depot) for maintenance treatment. It has both an antipsychotic and “behaviour-normalizing” effect in psychopathy-like disorders. Intramuscular injections are given once every 2-3 weeks. Rather often they have to be combined with a regular oral taking of benzhexol hydrochloride.

Azaleptin (Clozapine) produces an expressed antipsychotic effect, but, unlike other neuroleptics, it does not cause any extrapyramidal disorders and general depression. It is used for hallucinatory-delusional and affective-delusional disorders, particularly in chronic cases. The treatment may be complicated by deliria (they are usually preceded by bright colour dreams), sharp tachycardia and a higher body temperature. Collapses and agranulocytosis seldom occur.

Methotrimeprazine (Tizercine) produces a potent antianxiety effect and is notable for a soporific action. It is often administered only for nights as a subsidiary medicine. It can cause a sharp drop of blood pressure and collapse-like states.

Chlorprothixene removes anxiety, fear, restlessness, but, unlike tizercine, does not cause any severe listlessness and sleepiness, therefore it can be resorted to even at daytime.

Periciazine (Neuleptil) has acquired a reputation of a "behaviour corrector". It is widely used in paediatric and juvenile psychiatry for psychopathic disorders: it removes aggressiveness, restlessness, disinhibition (including sexual one), affective outbursts. Correction with benzhexol hydrochloride is required only when large doses are taken.

Thioridazine (Sonapax, Melleril) is mainly used for nonpsychotic disorders: a higher affectivity, short temper, neurotic anxiety. It suppresses sexual activity and delays the approach of an orgasm.

Clopixol (Zuclopentixol) produces expressed antipsychotic, specific inhibitory and nonspecific sedative effects. Its specific inhibitory action is particularly important when treating patients with agitation, restlessness, hostility or aggressiveness. Clopixol can also produce a transitory, dose-dependent nonspecific sedative effect, whose rapid development in the beginning of therapy (before the antipsychotic action begins) is advantageous for treating acute psychoses.

Fluanxol (Flupentixol) is notable for different pharmacological effects of its small, average and large doses. It is supposed that, along with a prevailing mechanism of pharmacological action, typical for neuroleptics from the group of thioxanthene derivatives, there is some relation between flupentixol and serotonin 5HT₂ receptors. It explains the antiautistic and activating effect characteristic of small and average doses of the drug. At the doses of 0.3-0.5 mg/day flupentixol produces antidepressant, anxiolytic and activating effects. It is used for mild and moderate depressions with anxiety or asthenia and apathy, as well as in neurotic anxious, asthenic and psychosomatic disorders. The antipsychotic action of flupentixol manifests itself in cases of administration a daily dose over 3 mg, and its expressiveness increases with enlargement of the dose. It is indicated for schizophrenia and other chronic psychoses with hallucinatory-paranoid symptoms, also accompanied by apathy, anergy and autism. The drug produces disinhibitory effect, facilitates activation of the patients who shut themselves off and are passive, increasing their communicability and social adaptation. High doses of flupentixol have a sedative effect.

Sulpiride (Eglonil) produces the best effect in mild depressions, mostly manifesting themselves by asthenia, apathy and anergy. No side effects are usually caused. Only a disturbance of the menstrual cycle is possible.

Olanzapine (Zyprexa) displays a higher extent of binding to serotonin 5HT₂ receptors versus D₂ ones. It is administered for treating acute forms of schizophrenia and

other psychoses with clearly expressed productive symptoms (delusions, hallucinations, disturbances of thinking, hostility and suspiciousness) and/or negative symptoms (a dull affect, emotional and social estrangement, poor speech activity), as well as for maintenance treatment. Olanzapine also alleviates secondary affective symptoms caused by schizophrenia. It is purposeful to provide long-term treatment for those patients who are sensitive to therapy at its initial stage, olanzapine producing a statistically reliable decrease in the manifestation of both negative and positive symptoms of the illness.

Risipolept (Risperidone) belongs to “atypical” neuroleptics, whose mechanism of therapeutic action is based on a balanced central antagonism of the drug to serotonin and dopamine. In this connection, the therapeutic action of this medicine involves the productive symptoms, as well as negative and affective symptoms of schizophrenia. It is indicated for treating acute attacks of schizophrenia, schizoaffective psychosis, other psychotic disorders with productive symptoms, for maintenance antirelapse therapy in schizophrenia. An early beginning of risipolept therapy makes it possible to achieve preservation of cognitive functions with the minimum stigmatization of the patients. Risipolept is also indicated for correcting behaviour disorders and treating psychotic symptoms in patients with dementiae.

Tranquillizers. This group of drugs is used for removing anxiety, restlessness, affective strain, and in order to normalize psychopathy-like behaviour. Such an action is called anxiolytic (removal of restlessness resulting from some objective cause) and sedative. They do not produce any antipsychotic effect. No extrapyramidal disorders occur. The mechanism of the action is related to excitation of benzodiazepine receptors in the limbic system and reticular formation, which in its turn activates GABA receptors and increases an income of chlorine ions with a resultant hyperpolarization of the membranes and inhibition of the neuronal activity. It also produces sedative, soporific, anticonvulsant effects, potentiating and myorelaxation. The side effect are represented by suppression of attention (for this reason, tranquillizers are not used in the process of such work activity which requires preservation of attention and coordination of movements), addiction and even development of drug dependence (stimulation of serotonin receptors results in a reduced activity of the neurons which synthesize serotonin).

Tranquillizers are divided into the following groups of drugs: 1) agonists of benzodiazepine receptors (diazepam, phenazepam, etc.); 2) agonists of serotonin receptors (buspirone, campirone, etc.); 3) substances with different types of effect (benactyzine, etc.).

Sibazon (Seduxen, Relanium, Diazepam, Valium), if infused intravenously, controls deliria, acute anxiety, convulsive seizures and dysphoriae (attacks of some malicious-melancholic mood with a disposition to aggression). It is orally used for neurotic anxiety, nonpsychotic depression, annoying thoughts. Its long-term taking may develop addiction and weakness for it. Large doses are abused for causing euphoria. If combined with liquor, it sharply intensifies intoxication.

Phenazepam is an original Ukrainian drug preparation. It suppresses excitement and the feeling of fear, even in situations of a real danger, but it causes listlessness, a delay of reactions, and sleepiness. It is indicated for nonpsychotic anxiety and annoying thoughts, as well as for depersonalization and derealization.

Chlozepid (Helenium) is now less common than other tranquillizers. It is

administered in neurotic disorders: annoying thoughts, anxiety, hypochondria. Its side effects include listlessness and (sometimes) cerebellar ataxia.

Nozepam (Tazepam) is the mildest tranquillizer. It causes neither listlessness, nor sleepiness, but delays reactions (it should not be taken when driving). It is indicated for outpatient treatment of neurotic and neurosis-like disorders. It does not cause addiction even after a long-term use.

Alprazolam (Cassadan, Xanax) is a mild tranquillizer with antidepressive activity. The medicine produces antianxiety, moderate soporific, antiphobic, autonomic stabilizing and anticonvulsive effects. A rapid anxiolytic effect of alprazolam may be accompanied by an euphoric action, thereby predisposing a nonmedicinal use of the drug. Alprazolam is used in the treatment of different anxiety syndromes: it effectively controls generalized anxious disorders, agoraphobic states, including those which manifest themselves with panic attacks.

Tranxen (Clorazepam, Tranxilium) produces a clear anxiolytic and moderate soporific effects with a mild expressiveness of the myorelaxant and sedative effects. It has a wide range of indications in psychiatry: psychopathies and neuroses with manifestations of anxiety, anxious depression, tics, for preventing delirium in cases of liquor withdrawal.

Hydazepam is characterized by a moderate anticonvulsant action, mild myorelaxant and sedative ones. This is a tranquillizer with an activating effect, autonomic stabilizing and soporific properties. It is indicated for neurotic and neurosis-like disorders with easy fatigability, short temper, depression and sleep disturbances. Owing to its mild action, it may be used for treating patients with an organic lesion of the CNS of various genesis, elderly and weakened patients.

Hydroxyzine (Atarx) is an anxiolytic with antihistamine, spasmolytic and weak antiemetic effects. It is used in neuroses, whose course is characterized by motor excitement and the feeling of fear in elderly patients, in manifestations of the abstinence syndrome in patients with chronic alcoholism, in childhood neuroses with an expressed psychomotor excitement, in pruritic dermatoses, allergic rhinitis. It is used within the postoperative period as an antiemetic and sedative drug.

Mebicar produces a good antineuritic effect, a mild hypotensive one, as well as analgetic, antidepressive and activating ones. There is no significant sedative and myorelaxant action. It is indicated for neuroses with adynamia and asthenic syndrome. It belongs to a group of "daytime" tranquillizers. It is used as an agent reducing a drive to tobacco smoking (in combined therapy).

Buspirone (Buspar) manifests anxiolytic properties, but it does not produce any sedative and soporific effects; it actually does not cause any addiction, it being his advantage over benzodiazepine derivatives. The anxiolytic effect of buspirone develops slowly (during 5-15 days) and resembles that of diazepam by its clinical characteristics. Buspirone is comparable with typical benzodiazepine derivatives by the efficacy of its influence on a generalized anxious disorder, but it is unable to develop a rapid action. Buspirone has moderate thymoanaleptic properties (which may be caused by its serotonergic influence). A stable antianxiety effect of buspirone is preserved if the drug is taken continuously. Even after many years of receiving buspirone the cessation of its taking does not cause the withdrawal syndrome. The administration of buspirone is

limited by absence of any rapid development of the anxiolytic effect, therefore it is of little use for treating acute states and paroxysmal panic disorders.

Antidepressants. This is a group of psychoactive drugs which remove depression (morbid blues). They are most effective in endogenous depressions. Their effect against reactive depressions caused by psychic traumas is significantly weaker. Some antidepressants are more effective in depressions manifesting themselves by melancholia, others in anxious depressions. The mechanism of the antidepressive action of the drugs may be related to suppression of the reverse neuronal uptake of catecholamines or suppression of monoamine oxidase activity in the central interneuronal adrenergic synapses. These mechanisms form the basis of the current classification of antidepressants:

1. Drugs suppressing the neuronal uptake of monoamines.

- 1.1. Nonselective effect (imipramine, amitriptyline).

- 1.2. Selectively blocking the uptake of noradrenaline (maprotiline).

- 1.3. Selectively blocking the uptake of serotonin (fluoxetine, sertraline, citalopram).

2. MAO inhibitors.

- 2.1. Irreversible, nonselective effect, MAO-A and MAO-B (nialamide, transamine).

- 2.2. Reversible, selective effect, MAO-A (moclobemid).

By the character of their action on psychotic symptoms, 3 groups of antidepressants are separated: 1) with a stimulatory effect (imipramine, cefidrine, petilin, nialamide, anafronil, transamine, indopan, bediul, iprazide, moclobemid, tetrindol, incasan); 2) with a sedative effect (amitriptyline, fluoracizine, herfonal, opipramol, damilen, azophen, trazodone, chloracizine); 3) with a stabilized stimulatory and sedative effect (pyrazidol, fluvocasamine, maprotiline).

Imipramine (Imizine, Melipramine, Tofranil, Anafranil) is mostly indicated in severe melancholic depressions with the feeling of anguish, inhibition, low spirits. The treatment usually begins with the parenteral administration (intramuscularly, by drops intravenously). An improvement comes after 4-5 days, then a change is made for oral taking. Melipramine disturbs sleep, therefore it should not be given before the night. Tizercine is often added before the patient goes to sleep. Melipramine may intensify anxiety, activate delusions and hallucinations. So, if depression is accompanied by such disorders (e.g., in schizophrenia), sedative neuroleptics are added to melipramine. The side effects include tachycardia, urinary retention (it is contraindicated for adenoma of the prostate), dryness in the mouth, a disturbance of accommodation (difficult reading). In manic-depressive psychosis, melipramine may contribute to a change from the depressive phase to the maniac one.

Amitriptyline (Tryptizol) is mostly used for anxious depressions. Its antidepressive effect is combined with the sedative one; it does not exacerbate delusions and hallucinations. The side effects are the same as caused by melipramine.

Pyrazidal is a Ukrainian drug, rather similar by its effect to amitriptyline. It is considered that this medicine calms anxious patients and encourages depressed ones. It is well tolerated and usually does not cause any side effects.

Moclobemid (Aurorix) is effective in mild depressive disorders and social phobias.

Its efficacy rate in psychotic depressions is somewhat lower. Along with the antidepressive effect, the spectrum of the psychopharmacological action of this medicine clearly reveals the psychoactivating effect, it is more effective in depressions with a melancholic component.

Anafranil (Clomipramine, Hydiphen, Clofranil) is a potent antidepressant with a so-called bipolar component of action, i.e. its activating and anxiolytic effects are equally expressed. The drug does not have any significant sedative property, the feeling of tiredness, a dissociation between the increasing activity and still existing melancholy, it being dangerous because of suicidal consequences. It is indicated for neurotic and endogenous depressions, including their protracted forms. It is successfully used for treating annoying thoughts and panic attacks.

Coaxil (Thianeptin) produces expressed antidepressive and anxiolytic effects when treating nonpsychotic anxious-depressive disorders. The drug has neither stimulating nor sedative properties. Along with neurotic depressive and somatoform disorders, the indications of coaxil also include chronic alcoholism at the period of abstinence accompanied by anxiety and depression.

Herphonal (Trimipramine) produces equally good effects both on depressions with inhibition and those with excitement. Its use is indicated in depressive states with various nosology, it is effective for sleep disturbances, the feeling of fear and restlessness. Its use is recommended for chronic painful conditions in somatic practice.

Mianserin (Lerivon, Miansan) has rather expressed thymoanaleptical and sedative properties, it contributes to the development of the soporific effect. By the intensity of its antidepressive action it yields to tricyclic antidepressants, but is more active in depressions of the nonpsychotic level.

Fluoxetine (Prozac, Prodep, Portal, Fludac, Framex) belongs to those antidepressants which combine the thymoanaleptical and stimulatory effects. Besides, it facilitates reduction of obsessive-compulsive disorders. It causes reduction of appetite and can be used for treating bulimia nervosa.

Paroxetine (Paxil, Seroxat) is used in depressions of different genesis, especially anxious depression because of its anxiolytic effect. Paroxetine produces the antidepressive effect with a mild tonic action.

Sertraline (Zoloft) is indicated for different forms of depression, including those which are accompanied by anxiety. It is used for treating obsessive-compulsive and panic disorders. Sertraline does not produce any expressed sedative or stimulatory effects.

Cipramil (Citalopram) is notable for a higher selectivity, if compared with other antidepressants of this group. It is recommended for depressions with different nosology and degrees of expressiveness, including somatic patients. The antidepressive effect of the medicine is accompanied by its good tolerance and safety when using together with somatotrophic drugs, cardiotoxicity is absent. Cipramil has the anxiolytic property, as well as the sedative and stimulatory effects which balance each other. It is recommended for use in somatized depressions, in combined treatment of alcoholism and narcomania.

Remeron (Mirtazapine) combines its powerful thymoanaleptical activity with an expressed anxiolytic effect, thereby making it possible to administer the medicine for a wide range of borderline and psychotic depressive disorders.

Thymostabilizers are drug preparations capable of preventing repeated phases of

affective disorders in manic-depressive and schizoaffective psychoses. The preventive treatment is given during many months and years. They are represented by lithium preparations.

Lithium carbonate controls maniac phases and prevents subsequent depressive and maniac ones. The dose is individually selected under the control of lithium level in the blood, which is maintained at the level of 0.6-1.6 mM/l. The drug should not be administered during depressions, as the depressive phase may become protracted. Diarrhoea has been noticed as a side effect. Tremor of muscles and thirst are signs of overdosage. Impairments of the kidneys and thyroid have been describes as complications.

Lithium oxibutyrate differs from its carbonate by a less toxicity and a higher activity. It is soluble in water; its intramuscular injections may be used for controlling maniac states.

Valproate (Depakine, Convulex, Orfiril). The effect of Valproate is based on its ability to increase inhibition of GABA-ergic receptors, thereby decreasing recurrent discharges of neuron membranes. It belongs to antiepileptic drugs, but also has the property to treatment of maniac phases of bipolar affective psychoses and prevents development of maniac and depressive phases. The drug is used with a dose of 1.2-1.8 g/day as a single dose or 2-3 divided ones. For children, the dose is 20-30 mg/kg. The drug is contraindicated in cases of hepatic diseases and a hypersensitivity to it.

Lamotrigine (Lamictal) inhibits strain-dependent sodium channels of the presynaptic membrane and a strain-related discharge of stimulating neurotransmitters of aspartate and glutamate into the synaptic cleft. This drug is effective in treatment of depressive phases of bipolar affective psychoses and prevents development of maniac and depressive phases. The dose for children is 2-10 mg/kg/day; if combined with other drugs it is 1-5 mg/kg/day. The dose for adults is 100-200 mg/day.

Carbamazepine (Finlepsin, Tegretol) belongs to antiepileptic drugs, but also has the property to prevent development of maniac and depressive phases. It is indicated for dysphoriae (attacks of a malicious-melancholic mood) in epileptoid psychopathy and epilepsy. The medicine is well tolerated, side effects are rare.

Psychostimulants are drug preparations which improve mood, ability for perceiving external stimulants, psychomotor activity. They reduce the feeling of fatigue, increase physical and mental capacity for work (particularly in cases of tiredness), temporarily reduce the need of sleep. These effects are based on a more intensive transmission of the process of excitation in the central interneuronal synapses, a higher adrenergic tone in the CNS and a stimulation of metabolic processes in nerve cells. These medicines are rather seldom used in the psychiatric practice. They are indicated for asthenic states. Psychostimulants are represented by the following medicines: 1) phenyl alkylamines – phenamine; 2) piperazine derivatives – methylphenidate hydrochloride; 3) sidnonimines – sidnocarb; 4) methylxanthines – caffeine; 5) benzimidazole derivatives – bemitil.

But such psychostimulants as phenamine (Amphetamine), methylphenidate hydrochloride (Centedrine, Methylphenidate) and caffeine easily cause addiction and weakness for them. Phenamine is included in the group of narcotic drugs.

Sidnocarb is a Ukrainian drug preparation, which does not cause either addiction

or weakness for it. It is prescribed for protracted neurotic and somatogenic astheniae. It is to be taken in the morning and daytime, as it may disturb sleep. Its overdosage causes sleeplessness, short temper and restlessness. It should not be administered in psychoses.

Sidnophen is a medicine, similar to Sidnocarb by its effect, but weaker of it as a stimulant. It is characterized by the antidepressive effect in asthenic depressions.

Nootrops are substances which activate higher integrative functions of the brain. The main manifestation of their activity consists in a favourable effect on disturbed training and memory, as well as a higher resistance of the CNS to hypoxia, it being achieved by activation of cerebral metabolic processes and circulation. The drugs have been created on the basis of substances of the biogenic origin (GABA, glutamic acid, vitamins) and are called remedies of the “metabolic” therapy.

Classification of nootropics

1. GABA derivatives: pyracetam, phenibut, aminalon.
2. Combined: neoglutin, pyriditol, orocetam, pantigam, vitapyracen.
3. Brain vasodilators: stugeron, cavinton, sermion, vinpocetin.
4. Different: aminalon, gingoging, encephabol, tanacan.

They are used in psychiatry in order to improve the capacity for work, an ability to concentrate attention, as well as to make better functions of the brain, memory and general state.

Pyracetam (Nootropil) is a GABA derivative. It is recommended for asthenic, asthenodepressive and asthenopathic states. No side effects are caused. An overdosage may manifest itself with short temper and sleep disturbances. It is used as an additional remedy in neuroleptic treatment for removing listlessness and sleepiness (i.e. as a corrector), as well as in posttraumatic and vascular mental disorders.

Aminalon (Gammalon, Ganeurin) is gamma aminobutyric acid. It is most frequently used in vascular diseases of the brain accompanied by chronic cerebrovascular insufficiency. A good effect is produced in cerebroasthenic and encephalopathic states of different etiology. It improves memory and thinking, contributes to the restoration of speech and movements after disturbances of the cerebral circulation, produces a mild psychostimulating effect, improves the state of patients with asthenodepressive manifestations. Aminalon is used in paediatric practice for a retardation of the psychic development. It is administered orally (before meals) by 0.5 g, 3-4 times a day, the daily dose is 1.5-3 g. A course of the treatment lasts from 2-3 weeks to 2-6 months.

Pyriditol (Encephabol) is pyridoxine disulphide. It is used in combined therapy for asthenodepressive, asthenopathic and neurosis-like states of the exogenic-organic nature (in posttraumatic, postinfectious, vascular encephalopathy). In paediatric practice, it is used for a retardation of the psychic development, cerebroasthenia, oligophrenia. It is administered in courses by 2-3 months orally, 15-20 minutes after meals 2-3 times a day (at daytime); a single dose for adults is 0.1-0.3 g, their daily dose is 0.2-0.6 g; a single dose for children is 0.05-0.1 g, their daily dose is 0.05-0.3 g.

Pantogam is a calcium salt. The drug is effective in asthenic states of the organic and endogenic genesis, in neurosis-like (neurasthenic, dyssomniac, obsessive-phobic, hypochondriacal) disorders, it alleviates vasopathic and neuroautonomic manifestations. It is also used for treating epilepsy in a complex with anticonvulsant medicines.

Administration of the drug for patients with extrapyramidal hyperkineses, caused by a long-term taking of neuroleptics, significantly reduces expressiveness of these complications. Pantogam is taken orally (15-20 minutes after meals) by a single dose of 0.25-0.5 g for children and 0.5-1.0 g for adults. The daily dose is 0.75-3.0 g for children and 1.5-3.0 g for adults.

Acephen (*Centraphenaxin*, *Lucidril*) is indicated for asthenic, asthenohypochondriacal states of the vascular genesis, endocrine disorders, organic lesions of the brain, neuroses. *Acephen* is used in the clinical treatment of nervous diseases for autonomic dysfunctions and disturbances in the cerebral circulation. It is administered orally by 0.1-0.3 g 3-5 times a day, subcutaneously, intramuscularly and intravenously.

Phennibut is a phenyl derivative of GABA. It is administered orally before meals by 0.3-0.5 g 3 times a day.

Picamilon is used in adults as a nootropic and vascular drug for mild and moderate disturbances of the cerebral circulation, autonomovascular dystonia, abstinence in alcoholic patients. In cases of vascular diseases, a single dose of the medicine is 0.02-0.05 g, 2-3 times a day. A course of the treatment lasts 1-2 months, it may be repeated 5-6 months later. For treating depressive states in elderly people, *Picamilon* is recommended by daily doses of 0.04-0.2 g during 1.5-3 months. At the period of abstinence in alcoholic patients the daily dose is 0.1-0.15 g for 6-7 days.

Nootrops include *cerebrolysin*, *glutaminic acid*, as well as those medicines which improve the cerebral circulation and psychic processes at the same time (*sermion*: tablets by 0.005 g and ampoules by 0.004 g for a parenteral administration, the daily dose is up to 25 mg; *cavinton*, *cinnarizine*, *trental*, etc.).

Below, doses of psychoactive drugs are recommended and their synonyms are given.

Azaleptine – see Clozapine.

Aminazine: intramuscularly from 2 to 5 ml of 0.25 % solution diluted with novocaine, 1-3 times a day. Oral 25 mg lozenges after meals, from 1 to 4 times by 1-6 lozenges (25-600 mg/day). Large doses are seldom used.

Amitriptyline: intramuscularly or intravenously by 2-4 ml of 1 % solution 2-4 times a day; oral 25 mg tablets by 1-3 pieces, 1-3 times a day (25-250 mg/day).

Haloperidol: intramuscularly by 0.5-1.0 ml of 0.5 % solution 2-3 times a day; oral tablets by 1.5 and 5 mg, or drops in the form of 0.2 % solution (10 drops contain 1 mg of haloperidol) at a dose of 1.5-15 mg, 1-3 times a day (the dose is to be selected gradually and individually).

Diazepam – see Seduxen.

IMAP: an intramuscular injection of 2-5 ml (4-10 mg), 1 time a week.

Imizine – see Melipramine.

Imipramine – see Melipramine.

Carbamazepine: oral 0.2-0.5 g tablets up to 2 pieces 1-2 times a day.

Clozapine: intramuscularly by 2-4 ml of 2.5 % solution 2-3 times a day (50-300 mg/day); orally (tablets by 25 and 100 mg) by 50-100 mg 2-3 times a day (all in all 50-300 mg/day).

Clopixol: Clopixol-acuphaz intramuscularly by 1-3 ml (50-150 mg); oral tablets by

2, 10, 25 mg, 6-75 mg/day or more (up to 200 mg); Clopixol depot by 200-400 mg (1-2 ml), 1-2 times a month.

Leponex – see Clozapine.

Librium – see Helenium.

Lyogen – see Moditen.

Lithium carbonate: orally by 0.3 g tablets 1-3 times a day by 1-2 tablets (the dose is selected under the control of the blood lithium level within the range of 0.6-1.2 mM/l).

Lithium oxibutyrate: intramuscularly by 2-4 ml of 20 % solution 1-3 times a day; oral 0.5 g tablets 2-3 times a day by 1-2 tablets (the dose is selected like for lithium carbonate).

Melipramine: intramuscularly by 2 ml of 1.25 % solution 1-3 times a day; oral 25 mg tablets 2-3 times a day by 1-3 tablets.

Melleril – see Sonapax.

Methotrimeprazine – see Tizercine.

Moditen: intramuscularly from 0.5 to 2 ml of 0.25 % solution 1-2 times a day; oral 1, 2.5 and 5 mg tablets, beginning with 1-2 mg 2-3 times a day; the dose should not exceed 30 mg a day.

Moditendepot: intramuscularly from 0.5 to 2 ml of 0.25 % solution 1 time during 1-3 weeks.

Neuleptil: orally in drops in the form of 4 % solution (in 1 g of Neuleptil) after or during meals and drinking by 3-15 drops 2-3 times a day.

Nozepam: orally by 10 mg tablets 2-3 times a day by 1-3 tablets.

Nootropil: orally by 0.4 g capsules 1-4 times a day; intramuscularly or intravenously by 0.5-1.0 g of the drug (an ampoule contains 5 ml of the solution = 1 g) 2-4 times a day.

Olanzapine: orally by 5, 7.5 and 10 mg tablets, 5-20 mg a day.

Periciazine – see Neuleptil.

Pimozide: orally by 1 mg tablets; they are taken only in the morning, beginning with 1 tablet and increasing the dose up to 5 tablets.

Pyrazidol: orally by 25 and 50 mg tablets, beginning with 25 mg 2 times a day, the dose is increased up to 200-400 mg a day.

Pyracetam – see Nootropil.

Relanium – see Seduxen.

Risperidone: orally by 1, 2 mg tablets, 1-8 mg a day.

Seduxen: intramuscularly or slowly intravenously by 2-4 ml of 0.5 % solution 3-4 times a day; orally by 5 mg tablets 2-3 times a day by 1-3 tablets.

Semap: long-acting 20 mg tablets, taken by 1-3 pieces 1 time during 5-7 days.

Sibazon – see Seduxen.

Sidnocarb: orally by 5, 10 and 25 mg tablets in the morning and at daytime.

Sidnophen: orally by 5 mg tablets, 1-2 pieces in the morning and at daytime.

Sonapax: orally in the form of 10 and 25 mg lozenges, by 1-3 pieces 2-3 times a day.

Stelazine – see Trifluoperazine.

Sulpiride – see Eglonil.

Tazepam – see Nozepam.

Tegretol – see Carbamazepine.

Tizercine: intramuscularly by 1-2 ml of 2.5 % solution; oral 25 mg tablets, usually taken before going to bed by 0.5-2 tablets.

Thioridazine – see Sonapax.

Tofranil – see Melipramine.

Triperidol – see Trisedil.

Tryptizol – see Amitriptyline.

Trisedil: intramuscularly by ampoules (1 ml contains 1 mg of the drug) for controlling excitements, from 1 to 5 ml; orally by 0.5 mg tablets and drops in the form of 0.1 % solution (1 drop contains 1 mg of Trisedil) 2-4 times a day at the dose from 0.25 to 2 mg, the daily dose is up to 6 mg.

Trifluoperidol – see Trisedil.

Trifluoperazine: orally by 1, 5 and 10 mg tablets, usually 2-3 times a day by 1-2 tablets (up to 60 mg a day); intramuscularly is seldom used by 1-2 ml of 0.2 % solution 2-4 times a day; the dose may be increased up to 10 mg.

Phenazepam: orally by 0.5 and 1 mg tablets 2-3 times a day by 1-2 tablets for outpatient treatment; the inpatient daily dose may be increased.

Finlepsin – see Carbamazepine.

Fluanxol: orally by 0.5, 1 and 5 mg tablets; small (0.5-3 mg) and moderate (4-15 mg) daily doses.

Fluanxol depot: intramuscularly 20-200 mg 1-2 times a month.

Fluphenazine – see Moditen.

Chlozepil – see Helenium.

Chlorpromazine – see Aminazine.

Chlorprothixene: orally by 15 and 50 mg tablets 2-4 times a day; the daily dose may be gradually increased up to 400 mg; intramuscularly by 1-3 ml of 2.5 % solution for controlling anxiety.

Eglonil: orally by 50 mg capsules by 1-4 pieces 2-4 times a day; its intramuscular use is rare (an ampoule contains 100 mg).

Helenium: orally by 5 mg tablets, 1-2 pieces 2-4 times a day.

Shock treatment. Before the appearance of psychoactive drugs, shock treatment was the basic method for many psychoses, schizophrenia in particular. At present, two kinds of shock treatment exist: electroshock and insulin shock.

Electroshock treatment (EST) was suggested in 1938 by an Italian psychiatrist U. Cherletti and a neurophysiologist L.Bini. Electrodes are applied to the patient's temples, and electric current with the voltage of 60-120 V runs through them during 0.2-0.4 sec. It develops a seizure similar to a grand mal. Such sessions are usually carried out every other day several times. The mechanism of the medical effect is not clear. This method proved to be effective in very severe depressions (when antidepressants fail to help), catatonic stupor and acute hypertoxic (febrile) schizophrenia. EST is also used as a way to overcome therapeutic resistance to psychoactive drugs in chronic mental disorders.

There are several modifications of EST. A session is carried on after *premedication with myorelaxants* (most frequently, diacetylcholine is used): a seizure passes without any convulsions, but with disengagement of consciousness. A respiratory arrest may

occur, therefore an artificial respirator is required. The removal of convulsions make it possible to avoid complications in the form of fractures.

Monopolar EST is another modification: the current runs through one cerebral hemisphere, as one electrode is connected to a temple and the other above it, closer to the coronal suture. The convulsions may be significantly weaker, but the efficacy is lower too.

EST complications may be in the form of prolonged respiratory breath-holding after a seizure, a dislocation of the mandible and fractures, particularly fissures of the lower thoracic vertebrae. Sometimes it is possible to observe expressed retrograde and anterograde amnesia for a certain period of time.

EST is to be provided only by the patient's written consent; if he is not able to solve problems concerning his treatment, then his legal representatives' consent is required. A decision about giving EST is taken by a commission of doctors after a thorough somatic examination of the patient.

Insulin shock treatment consists in giving the patient on an empty stomach some individually selected dose of insulin which causes hypoglycaemic coma (or a subcoma state). This state is interrupted by an intravenous injection of glucose. The method was suggested in 1933 by an Austrian psychiatrist M. Zackel. Insulin shocks are caused every day, during 10-30 days. A thorough preliminary somatic examination is required. Different complications are possible. The period of hypoglycaemia may develop fits of convulsions, a collapse-like state, cardiac arrhythmiae. Repeated hypoglycaemiae are possible, especially at night. Chronic infections exacerbate. Sometimes there may be protracted comas, which are not interrupted by glucose.

At present, insulin shock treatment is seldom used. It is most indicated for paranoid schizophrenia which began not more than a year ago. The treatment is to be provided by the patient's or his legal representatives' written consent too.

Other methods of therapy. Psychosurgery still is a field of searching for new methods of treatment. In 1930s-1940s, lobotomy (leukotomy) was common, i.e. cutting of certain nerve routes with a resultant interruption of relations between the frontal lobes. Remote results proved to be unfavourable (severe organic dementia developed). This operation was prohibited in our country, in others they have just discontinued making it. Nowadays attempts are made to use stereotaxic methods. For instance, cingulotomy is suggested for severe persistent annoying thoughts which urge on suicide.

Psychotherapy and social therapy. Psychotherapy is treatment by means of influence of psychic factors: words, nonverbal conditional stimulants, situation, certain kinds of work, etc.

Social therapy, by its essence, is a part of psychotherapy which uses sociopsychological factors: influence of the social environment proper, various social (e.g., clubs of former patients) or collective activities. Psychotherapy is used in different fields of medicine. It is of particular importance in such diseases, where a leading part in their development is played by a psychic factor (neuroses and other reactive states, psychosomatic diseases), when the disease itself puts the patient in stress conditions (e.g., pre- and postoperative period) or becomes a severe psychic trauma (e.g., it results in disability). Psychotherapy is the main method of treatment for neuroses, but it is actually used almost in all mental disorders. Peculiarities of psychotherapy in different mental

diseases are described in relevant chapters.

Methods of psychotherapy. All the methods of psychotherapy are usually divided into the following basic groups: *suggestive, behaviour, rational* and *psychoanalytical*. Besides, depending upon the people engaged into psychotherapeutic sessions, psychotherapy may be *individual, group* and *family*.

Suggestive methods use suggestion (from Latin *suggestio*) in different forms. The most well known suggestion is in the state of hypnotic sleep. The techniques of hypnotic suggestion are described in special manuals. This method may be used only by a physician who has received some special training in psychotherapy. The word of the suggesting person produces a more potent effect, because in the process of sleep it comes through the only awaking channel for receiving information from outside. But it is only some part of the patients who may submit to the influence of hypnosis. It produces a better effect on those people who suffer from hysterical neurosis and chronic alcoholism. It is impossible to hypnotize the patient without his consent and wish, neither it is possible to force him in the state of hypnosis to make some acts which radically contradict his personality.

Suggestion in the state of narcotic sleep (narcohypnosis), achieved by injections of small doses of hexenal or barbamil, facilitates submersion into the sleepy state and increases hypnoability of some patients.

Suggestion in the state of wakening is achieved by some peremptory, authoritative and confident statements made by the psychotherapist. His widely known reputation, fame of a “healer” increase the effect and broaden the circle of people submitting to his influence.

Suggestive methods are notable for the fact that in some patients, particularly those with hysterical straits of character, they may sometimes produce a rapid striking effect, but the latter is usually unstable. When the real cause of a disorder is not eradicated, a relapse is inevitable.

Autogenic training (autosuggestion) was suggested by a German psychotherapist I. Schultz in 1920. This is a suggestive method too, but it uses self-suggestion achieved by specially elaborated exercises. At first, the patient is trained to “feel” heaviness, warmth, cold in different parts of his body and then he repeats to himself different “verbal formulae”, convincing himself in achieving a required effect.

Placebo therapy consists in using placebo medicines which by their appearance, smell and taste do not differ from certain drugs (tranquillizers, soporifics, etc.), but really are absolutely indifferent substances. Also employed is the suggestive mechanism, if the patient was told about an expected effect, or the conditioned reflex one, if he has already experienced the effect of this drug before.

Behavior, conditioned reflex methods are based on causing conditioned reflexes. For instance, a conditioned vomiting reflex is caused to the appearance, smell and taste of alcohol by a combination of a small dose of liquor and emetics. Other ways of “teaching” are practiced too. For example, the patient with annoying apprehensions is many times forced to imagine the situation, which causes the fear; as a result, the feeling of fear gradually dies away, it is inhibited.

Rational methods address themselves to the patient’s consciousness, his reason; they are based on logically making the patient change his mind, explaining him the

nature of the disorders and ways for their elimination. The psychotherapist's authority, prestige and knowledge are important for the direct approach (active persuasion of the patient). For indirect approaches, when the psychotherapist and patient act as partners, together assessing the causes of disorders and their possible overcoming, not less important is the physician's capacity for empathy, i.e. his ability to feel the patient's sufferings, be imbued with his troubles and anxieties.

On the basis of studying the patient's personality and peculiarities in the system of his relationships, *pathogenetic personality-oriented (reparative) psychotherapy after Miasishchev-Karvasarsky* tries to reveal psychogenic mechanisms of mental (mainly neurotic) disorders and achieve his realization of the casual relationships between peculiarities of his personality relations and the disorders which have developed. But the matter is not limited by the aim that the patient should only understand the essence of the psychogenesis of his disorders. The aim consists in restoration of the system of personality relations, lie directions, plans for future, the style of behavior, without which no recovery is possible.

Group psychotherapy means psychotherapeutic sessions simultaneously with several or even many patients (group hypnosis, autosuggestion), as well as sessions where there is active cooperation of the group members. A group discussion may serve as an example, when various problems, situations, individual biographies, behavior and feelings of certain people (including participants in these talks) are jointly discussed. Playing of role functions is another example. One by one, in short scenes members of the group play different parts (a spouse, a parent, a subordinate or chief, etc.) or practice in addressing other people with a request, demand, apologies, with an intention to make it up with somebody with whom they were on bad terms, to meet somebody halfway. Nonverbal group psychotherapy, e.g., psychic gymnastics, is intended for learning how to express one's own and understand somebody else's feelings, wishes and thoughts without words.

Family psychotherapy, as a matter of fact, is a variety of the group one, but the group consists of the family. When neurosis and other reactive states are caused by an intrafamilial conflict, this kind of psychotherapy is directed at normalizing relations in the family and becomes the decisive method of treatment. In different mental diseases, family therapy proves to be useful for strengthening remissions, preventing relapses, raising the level of the patient's social functioning. The family should learn to understand manifestations of a mental disorder make feasible demands of the patient and impel him to do what he is able to.

Psychoanalytical methods are based on doctrines by a famous Austrian psychiatrist, psychologist and neurologist Sigmund Freud. The essence of psychoanalysis consists in extracting suppressed internal conflicts and psychic traumas, which were forced out from the consciousness into the sphere of the subconscious. It was as early as by Freud that an analysis of dreams and a method of free associations were suggested. Dreams are regarded as symbolic manifestations of some repressed, secret wishes and fears. According to Freud, sexual desire (libido) is the leading subconscious force. For instance, any oblong object (a post, tree, walking-stick, etc.) in a dream symbolizes a penis, any hollow (from a cave to an open saucepan) means a vagina. Free associations (the patient is suggested to say aloud everything that comes to his head) make it possible

for subconscious complexes to burst through in the form of some unexpected remarks or slips of the tongue. Much therapeutic attention is attached to a “transfer”, i.e. a “shift” of the repressed feelings (love, hate, irritation, etc.), had by the patient towards his parents and other emotionally important people, from him to the psychotherapist. On the other hand, there is a “countertransfer”, when the psychotherapist “shifts” feelings of a parent, spouse, etc., on the patient.

Modern Neo-Freudianism exists in the form of several schools. All of them differ from the “classical” Freudianism by the fact that a larger part in the human psyche is assigned to the consciousness and a smaller one to sexuality. Actually like before, the main attention remains concentrated on the subconscious and sexual. But some of the statements, developed mostly by the psychoanalytical school, have gained rather wide recognition. Among them there is a doctrine about kinds of the psychological defence mechanisms, which include the following ones.

Compensation is an urge for achieving success and prestige in another field, when the person feels his own inferiority in something; e.g., an urge for developing physical strength in case of a mental deficiency.

Hypercompensation (or “supercompensation”) is a craving for success just in the field where one’s own inferiority is felt. Patients with sensitive psychopathy would overcome their shyness and bashfulness, holding the posts which require constant personal contacts. Former drunkards, who have given up drinking, would become militant abstainers.

Denial is a flat refusal to recognize something evident, what seems intolerable or wounding one’s self-respect. In case of a hysterical reaction to a sudden death of a relative, upon whom one’s own well-being depended, this person “would not believe” this relative’s death and behave as if this person were still alive. A person, dying from cancer, does not want to realize that he has a malignant tumour and is ready to attribute his bad state to other causes. Patients ill with alcoholism, despite an expressed dependence upon it, would deny it and persuade other people and themselves, that if they want they are able to give up drinking at any moment.

Rationalization is explanation of what has happened with deliberately invented logical reasons or an attempt to justify one’s behaviour (“I started smoking hashish because it increased my creative abilities, as I had to support the family which was on my hands”).

Conversion means somatic disturbances which as if symbolically reflect unwillingness to reconcile oneself to the situation. For instance, when an opera singer did not receive the part that she had a claim on and instead was given another one which she did not regard as prestigious, she absolutely “lost” her voice and spoke only in a whisper (hysterical aphonia).

Displacement is a transfer of wishes, emotions and thoughts from the primary object, which is unacceptable, to another one substituting for it. For example, for the parents of a narcomaniac the very thought that their son’s drug abuse was mainly caused by his incorrect upbringing and intrafamilial conflicts is intolerable, and they put all the blame on a narcotics dispensary, where “he was referred only for an examination, but left it as a narcomaniac”.

Dissociation is split personality owing to an intolerable situation. Some hysterical

disorders may serve as examples. Thus, residents of some regions of Russia may suffer from an “obsession with an ikotka”. This is the name for a specific creature which, as they believe, installs itself in a human being, speaks with his voice, makes great demands of other people, forces to “indulge” it, threatening with a seizure for the person in whom it has installed itself.

Idealization is an evident exaggeration of abilities, services, advantages and any other positive qualities of some person, community, organization or movement, to which this person belongs or upon what he depends. This is particularly characteristic of the conforming type of the character accentuation: idealization of one’s surroundings gives an emotional support and justification for one’s own behaviour.

Identification is a subconscious imitation of some idol in the behaviour, views, tastes, etc. (if it is done consciously, it is called imitation). This mechanism is particularly important for juveniles as a way of self-affirmation.

Projection is a subconscious transfer of something unacceptable in oneself to other people. For instance, a father would willingly find and be implacable to those negative qualities of his son which he does not want to recognize in himself. One’s own shortcomings are transferred to other people (“Everybody drinks” is a common statement made by alcoholics).

Introjection is a mechanism contrary to projection, when something hated or adored outside is transferred to oneself. For example, in the state of dysphoria, instead of aggression towards other people that may cause severe consequences, self-aggression is displayed with resultant self-injuries (usually they are not dangerous).

Regression is a transfer to the infantile level of behaving, reacting and thinking as a way of defence against life adversities; e.g., hysterical puerilism, when in the situations of arrest or court examination, concerning committed offences, people behave like young children.

Sublimation is the state when an instinctive desire, particularly sexual one, cannot be satisfied because of some moral-ethic principles or other restrictions imposed on the people by themselves. With a double energy the patients would strive for some activity, which is socially acceptable and even encouraged. For instance, repressed sexual desires stimulate creation of works of art, inventing, etc.

Substitution is a subconscious replacement of an unachievable or unacceptable aim by another one, which is more achievable and acceptable. For instance, having no opportunity or ability to become an actor, the patient is ready to do any work at the theatre, film studio, etc. The love, undivided by the spouse, is transferred on the children.

“*Undoing*” is an alleviation of some internal tension, restlessness, anxiety by performing rituals, repeating invocations, etc.

The mechanisms of psychological defence may play a double part. In some cases, they form the basis of neurotic disorders and are revealed in the process of psychoanalysis or pathogenetic personality-oriented psychotherapy. In other cases, on the contrary, such mechanisms really play a defensive part (e.g., sublimation) and become strengthened in the process of psychotherapy.

Other psychotherapeutic and social therapeutic methods include *musicotherapy* (a certain emotional state is achieved by listening to specially selected music, choral singing), *bibliotherapy* (reading of specially selected fiction in order to change the mood

or, by a similarity between the described situations and events in the patient's life, to help him find a way out of a difficult situation, to correct his plans, etc.), *play therapy* in children, *art therapy* (artistic creative work, in the process of which the patient may "react" his repressed feelings), and others.

Work therapy is a system of work processes: from the least difficult, distracting from morbid feelings and taking time (therapy with being busy), to training in new professions, if the illness requires it. Work therapy is the most important method of social therapy.

Psychoeducation, psychohygiene, psychoprophylaxis and rehabilitation of mental patients

Psychoeducation – gradually implemented the system of psychotherapeutic influences, providing information to the patient and his relatives about mental disorders and their training in co-ownership with the specific challenges posed by the manifestations of the disease.

The purpose of psychoeducation are:

- formation of patients and their families an adequate idea about the disease;
- reducing emotional stress caused by the fact, and the manifestations of mental illness;
- the decline in patients and their families, and the level stigmatization self-stigmatization;
- getting patients to the role of pharmacotherapy and psychotherapy in the treatment, the possibility of side effects and control;
- education of patients and their families the ability to recognize early signs of worsening disease;
- teaching patients coping skills with the disease;
- correcting distorted social positions disease patients and improve their communication skills;
- increase of compliance;
- providing "psychosocial support"
- improving the quality of life of the patient.

Mental hygiene is a complex of measures for preservation and promotion of mental health, creation of conditions for normal development of the personality and for its optimum functioning.

Mental hygiene studies environmental effects on the human mental health, reveals risk factors of mental disorders on job, in everyday life, public and nature, it determines and organizes ways and methods for their overcoming.

A relation between psychiatry and social hygiene is exercised via mental hygiene. The latter is often connected with psychoprophylaxis, studying such factors as social-psychological, dysadapting and compensating for the psychic sphere.

The modern stage in the development of the society is characterized by a sharp change in the conditions of man's life and higher demands to the state of his health, the level of his physical (biological) and intellectual functions. Typical for people today is reduction of their adaptive capacities and functional reserves of the organism, disturbances in the mechanisms of self-regulation; it naturally results in a higher

morbidity rate of many noninfectious diseases and requires solution of the problems concerning their correction and prevention.

The main task of mental hygiene is to create favourable conditions for an all-round harmonious development and realization of all mental faculties of people (good family, normal nourishment, a good material well-being, favourable living conditions, etc.).

The sections of mental hygiene are systematized with regard for comparative age-specific peculiarities of the psyche. The following aspects of mental hygiene are separated: *mental hygiene of childhood, a child's playing activity, upbringing, education, sexual feeling, youth, work, family, sexual life, marriage.*

The mental hygiene at the preschool age (the period of formation of the personality nucleus) includes:

- 1) keeping of a reasonable regime of day, diet, work, play activities, rest, sleep, etc;
- 2) provision of a normal psychological situation in the family and a children's educational collective, a normal care and demands;
- 3) problems of the family fullness, its well-being (incomplete families, divorces, single mothers, mental stresses, alcoholization, etc.), living conditions (overpopulation, conflicts, early sexual experience, etc.), material welfare, etc.

Particular attention should be paid to the problems of mental hygiene at the school (prejuvenile, juvenile and young) age, since in recent time there is a rise in the mental morbidity rate of this age group.

Unfavourable effects are produced by the following general school problems:

- 1) an inability to cope with academic loads (incorrectness and complexity of syllabi and other demands);
- 2) a teacher's hostile attitude to backward pupils, injustice to all or some pupils with a resultant mutual apathy, etc. (Ushinsky K.D. emphasized, "The school should be the reign of seriousness, allowing a joke, of sweetness without sickliness, of justice without captiousness, of kindness without weakness, of order without pedantry, and, above all, of a constant reasonable activity.");
- 3) changes of school collectives (a necessity to get adapted to schoolmates and teachers, to the relations which have already been established);
- 4) rejection by a school collective (complicated emotional relations in a children's collective, significance of sympathies and antipathies, an urge towards leadership and independence, a particular part of streaks of the character, etc.

The following general psychological problems are important:

- 1) upbringing of psychological sex differences at the preschool and school age (belonging of the certain sex to certain trends in the work and household activities, family orientation, etc.);
- 2) sex-related physiological and psychological differences at the juvenile and young age (puberty, development of secondary sexual characters, changes in the appearance, difficulties in professional orientation, an urge towards independence, freedom and occupying a corresponding social place, etc.

In order to ensure *mental hygiene of the family*, on which the children's normal development depends to a considerable extent too, very important are the following factors: mutual respect and support; mutual help in household activities; a

psychologically rational solution of the conflict situations which appear; involvement of all the members of the family in settling issues concerning important purchases, places for going to rest, etc.; provision of a healthy way of life (without bad habits); bringing up the children (on their parents' own examples) to be modest, honest, industrious, etc.

Mental health is also preserved owing to mental-hygienic measures for ensuring mental and physical work (its rational organization, a regime of work and rest, optimum loads, a favourable psychological climate in the work collective, positive emotional directions for work, an adequate choice of the profession, etc.).

Psychoprophylaxis is a complex of measures for preventing mental disorders and diseases (primary psychoprophylaxis), as well as relapses of the mental diseases suffered before (secondary psychoprophylaxis).

Primary, secondary and tertiary preventions are separated. *The primary prevention* includes prophylaxis of mental diseases in mentally healthy people. This is protection of health in future children, genetic consultations, measures directed at sanitation of women, organization of obstetric aid, an early revealing of developmental defects in newborns, medical-pedagogical correction.

Secondary prevention consists in early diagnosing, early beginning of treatment, use of adequate methods of correction, long-term maintenance drug therapy of a mental disease, prophylaxis of relapses and a transfer to a chronic course.

Tertiary prevention is a system of measures directed for prophylaxis of disability in patients ill with chronic diseases.

Psychoprophylactic measures are directed at the following things:

1) prevention of psychotraumatizing influences on job and in everyday life (this is the basis for preventing neuroses, psychopathies and some other kinds of psychic pathology);

prevention of iatrogenies and didactogenies;

2) provision of opportune treatment and psychotherapeutic care for somatic patients and convalescents (attention, kindness, etc.);

3) an individual approach in determining job loads after the illness, regulation of the working and living conditions;

4) provision of antirelapse therapy after the illness.

Besides the above listed, a particularly important place in mental prophylactic measures belongs to *the creation of a correct regime of meals and rest, a favourable psychological climate at home, at a medical establishment and on job, a psychotherapeutic training of the whole personnel and their corresponding bedside manners.*

Social-occupational rehabilitation. This is restoration of the person's social status and rights. One of the basic principles of the rehabilitation consists in the unity of biological and social methods of influence. The patient's drug treatment should be combined with consulting and pedagogical work and solving his social problems. Work with the patient should be accompanied by sanitation of his medium, and changes (favourable for the patient) of relationships in his family, on job and in his social activity. The patient himself should be made an active participant interested in the rehabilitative measures, which are to be carried out in consecutive order, with changes in the forms and methods of influencing the patient.

Mental diseases often involve the individual's personality with a resultant break in social relations. Rehabilitation of mental patients, first of all, comes to their resocialization.

It is necessary to preserve the patient's interests at all the stages of the therapy given. Psychiatrists should not only try to make mental disorders in the patient disappear or reduce their intensity, but also take care about creation of his firm social status after the illness, his adaptation to work, training in new occupational skills. Even at the stage of the tertiary mental prophylaxis it is necessary to encourage the patient's work activity, using his residual capacity for work. One should not be in a hurry to give a disability status to patients even in cases of chronic mental diseases. A more favourable effect on the course and outcome of a disease is produced, if the patient is given an opportunity to remain in his former work collective with a change in his working conditions.

If the patient becomes disabled, it is very important to offer him work at medical industrial workshops, where his life passes in a collective, it contributing to appearance of new emotional and business contacts.

The level of rehabilitation depends upon the attitude to the patient in his family and the situation where he is to return to after the treatment.

The basis of rehabilitative activity is created only after disappearance of acute psychopathological symptoms. The concrete content of rehabilitation depends upon the character of the illness and individual peculiarities of the patients.

Control questions:

1. Describe maintenance therapy. Give example, please:

2. What is the struggle with therapeutic resistance?

3. Which groups of psychoactive substances do you know? Enumerate them.

4. What methods of psychotherapy do you know?

5. What is psychoeducation?

Tests questions:

1. A 46-year-old patient A., who was treated after surgery in the surgical ward, was detained by hospital guards. During the evening doctor's round the patient in the state of motor excitement, experiencing frightening visual hallucinations (a lot of rats in the ward) broke the window and ran out into the street and tried to escape. Anamnesis: he abused alcohol for last 16 years, there are periodic binges, one of which has been suddenly interrupted before surgery. What kind of therapy must you prescribe to a patient?

- A. Antidepressiv therapy
- B. Antipsychotic therapy
- C. Psychotherapy
- D. Anxiolytic therapy
- E. Thymostabilizers

2. A 61-year-old patient A., has been taking antihypertensive drugs regarding hypertension during many years. When she found out that his son was under examination she became restless, extremely worried. Ceased to understand where she was, did not recognize her relations. She heard "voices" which threatened to kill her and her son. She requested not to send her to jail. Then she dashed around the room, opened the window (8th floor) and tried to jump down. She was resistant to hold her. Which group of drugs should be used for relief of agitation?

- A. Nootrops
- B. Antidepressants
- C. Tranquilizers
- D. Antipsychotics
- E. Hypotensive

3. A patient has had 12 generalized convulsive seizures during an hour. Between the seizures the patient did not maintain clear consciousness (was in a coma or sopor). What preparation must you choose for control of the epileptic status?

- A. Valproate
- B. Amitriptyline
- C. Olanzapine
- D. Sibazon
- E. Pyracetam

4. A 19-year-old female patient has a mental disease since the age of 16, the course of disease has no remission periods. At a mental hospital the patient mostly presents with non-purposeful foolish excitation: she makes stereotypic grimaces, exposed, masturbating in front of a loud laugh, with non-continuous thinking, repeating the stereotypical abusive shouts. The patient should be treated by:

- A. Mood stabilizers
- B. Antidepressants
- C. Nootropics
- D. Tranquilizers
- E. Antipsychotics

5. A 30-year-old woman complains of pain in the heart area (“aching, piercing pain”) that arises primarily in the morning hours in autumn and spring. Pain irradiates into the neck, back, abdomen and is attended by rapid heart rate and low vital tonus. This condition occurs independently from physical exertion. In the evening her condition improves. Somatic and neurologic state and ECG have no pathologies. What treatment must you prescribe to a patient?

- A. Lithium oxibutyrate
- B. Risperidone
- C. Pantogam
- D. Sertraline
- E. Carbamazepine

Situation tasks:

30 years-old patient with prolonged psychotraumatic situation takes xanax in big doses without control of a doctor: What are the side effects that can be provoked by tranquilizers?

I. QUESTIONS UNIT

1. Subject and tasks of psychiatry.
2. Achievements of domestic 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, psychodiagnosical.
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.

II. QUESTIONS UNIT

1. Depressive syndrome: the psychotic and non-psychotic variant. Diseases in which it occurs.
2. Asthenic syndrome and its variants. Diseases in which it occurs.
3. Neurasthenic syndrome. Diseases in which it occurs.
4. Obsessive-compulsive syndrome. Diseases in which it occurs.
5. Dymorfophobia, dymorfomania syndromes. Diseases in which they occur.
6. Apathy- abulia syndrome. Diseases in which it occurs.
7. Delirious syndrome. Diseases in which it occurs.
8. Oneiric syndrome. Diseases in which it occurs.
9. Amential syndrome. Diseases in which it occurs.
10. Derealization and depersonalization syndrome. Diseases in which it occurs.
11. Maniacal syndrome. Diseases in which it occurs.
12. Paranoid syndrome. Diseases in which it occurs.
13. Paranoiac syndrome. Diseases in which it occurs.
14. Paraphrenic syndrome. Diseases in which it occurs.
15. Hebefrenic syndrome. Diseases in which it occurs.
16. Catatonic syndrome. Diseases in which it occurs.
17. Psychoorganic syndrome. Diseases in which it occurs.
18. Abstinence (withdrawal) syndrome. Diseases in which it occurs.
19. Pathological and physiological affects. States in which they occur.

III. QUESTIONS UNIT

1. Mental disorders in somatic diseases. Classification. The clinical picture. Treatment approach.
2. Mental disorders in infectious diseases. Classification. The clinical picture. Treatment approach.
3. Mental disorders in HIV - infection. Classification. The clinical picture. Treatment approach.
4. Mental disorders in brain injuries. Classification. The clinical picture. Treatment

approach.

5. Mental disorders owing to intoxications. Classification. The clinical picture. Treatment approach.

6 Mental and behavioral disorders owing to alcohol drinking. Classification. The clinical picture. Treatment approach.

7. Dementia in various diseases. Classification. The clinical picture. Treatment approach.

8. Mental and behavioral disorders owing to use of psychoactive substances. Classification. The clinical picture. Treatment approach.

10. Non-chemical addiction. Classification. The clinical picture Treatment approach.

11. Adjustment disorder. Classification. The clinical picture. Treatment approach.

12. Neurasthenia. The clinical picture. Treatment approach.

13. Dissociative and conversion disorders. The clinical picture. Treatment approach.

14. Anxiety-phobic disorders. The clinical picture. Treatment approach.

15. PTSD. The clinical picture. Treatment approach.

16. Eating Disorders. Classification. The clinical picture. Treatment approach.

17. Schizophrenia. Classification. The clinical picture. Treatment approach.

18. Primary psychotic episode. The clinical picture. Treatment approach.

19. Bipolar Disorder. Classification. The clinical picture. Treatment approach.

20. Masked depression. Classification. The clinical picture. Treatment approach.

21. Suicidal behavior in mental illness and in mentally healthy individuals.

22. Mental disorders in epilepsy. Classification. Clinical picture (generalized tonic-clonic seizure (grand mal), Minor seizures, status epilepticus). Treatment approach.

23. Oligophrenia and development retardation, Boundary mental retardation. Classification. The clinical picture. Treatment approach.

24. Personality and behavior disorders in adults. Classification. The clinical picture. Treatment approach.

25. Autism spectrum disorders. Classification. The clinical picture. Treatment approach.

26 Attention Deficit Hyperactivity Disorder (ADHD). Classification. The clinical picture. Treatment approach.

IV. QUESTIONS UNIT

1. General principles of treatment of mental disorders.

2. Classification of psychotropic drugs. Indications.

3. Neuroleptics. Classification. Indications. Side effects.

4. Antidepressants. Classification. Indications. Side effects.

5. Tranquilizers, anxiolytics. Classification. Indications. Side effects

6. Mood stabilizers. Classification. Indications. Side effects.

7. Anticonvulsants. Classification. Indications. Side effects.

8. Nootropic drugs. Classification. Indications. Side effects.

9. Drugs for dementia treatment (acetylcholinesterase inhibitors). Classification. Indications. Side effects.

10. Psychostimulants. Classification. Indications. Side effects.
11. Psychotherapy. Classification. Indications.
- 12 Epileptic status emergency aid.
- 13 Psychomotor agitation emergency aid
14. Psychoeducation.
- 15 Forensic psychiatric examination. The issue of sanity and insanity.
- 16 Labour expertise of mentally ill persons. The concept of ability, disability. The issue of the custody of mentally ill persons.
- 17 Military expertise.