EPIDEMIOLOGY

Pretest self-assessment
for the V year English medium students
of the Faculty of Medicine

МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
Харківський національний медичний університет

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для самооцінки студентів V курсу
медичного факультету
з англійською мовою викладання

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CONTENT

IMMUNOPROPHYLAXIS OF INFECTION DISEASES
PLANNED AND EMERGENCY IMMUNIZATION
ESTIMATION OF IMMUNOPROPHYLAXIS EFFECTIVENESS

1. Planned immunoprophylaxis is administrated for
a) children enter to school;
b) children who attains a sufficient age;
c) persons from risk groups;
d) in nidi of infection disease;
e) infected persons.

2. Name vaccine with intramuscular introduction
a) BCG;
b) inactivated poliomyelitis vaccine;
c) live attenuated measles vaccine;
d) live attenuated mumps vaccine;
e) live attenuated rubella vaccine.

3. Name vaccine-preventable disease
a) shigellosis; *c) salmonellosis;* *e) malaria.*
в) scarlatina; *d) measles;*

4. Artificially acquired active immunity is induced by:
a) infection;
b) placental transfer of antibodies;
c) vaccination;
d) injection with immunoglobulins;
e) all variants are listed.

5. Clinical effectiveness of immunization is illustrated by
a) clinical course of disease;
b) reduce expenses are connected with population morbidity;
c) percentage of persons with protective level of antibodies;
d) level of morbidity among vaccinated persons;
e) all variants are listed.

6. Name live vaccine
a) DTP; *b) VHB;* *c) Hib;* *d) MMR;* *e) VHA.*

7. Measles immunity is transmitted from mother to newborn child is:
a) artificial; *c) natural passive;* *e) natural active.*
в) innate; *d) artificial passive;*

8. The most effective measure prevents VHB infection in risk group is
a) immunoglobulin prophylaxis;
b) sterilization of medical instruments;
c) application of protective clothing;
d) vaccination;
e) sera prophylaxis.

9. The artificial passive immunity is formed by
a) vaccine introduction;
b) toxoid introduction;
c) bacteriophage introduction;
d) serum introduction;
e) administration of antibiotic.

10. A preparation for emergency tetanus prevention is
a) MMR; *c) IPV;* *e) DTaP.*
в) TT (Tetanus toxoid); *d) DTwP;*

11. Indication for emergency prevention of tetanus is
a) closed fracture; *c) first-degree burn;* *e) dysfunction of bowels.*
в) angina; *d) animal bite;*

12. BCG consists of
a) m. tuberculosis; *c) m. leprae;* *e) none of the above.*
в) m. bovis; *d) m. avium;*

13. Normal local reaction after BCG vaccination is
a) abscess;
b) infiltrate is 5–10 mm in diameter with nodule in the center;
c) axillary's lymphadenitis;
d) orange skin;
e) hyperemia is more than 3 cm in diameter.

14. Enumerate the EPI targets six diseases
a) tuberculosis, mumps, measles, rubella, poliomyelitis, viral hepatitis B;
b) tuberculosis, tetanus, measles, pertussis, poliomyelitis, diphtheria;
c) tuberculosis, tetanus, measles, viral hepatitis B, poliomyelitis, diphtheria;
d) scarlatina, tetanus, rubella, pertussis, poliomyelitis, diphtheria;
e) *tuberculosis, tetanus, measles, viral hepatitis A, poliomyelitis, diphtheria.*

15. Contraindications for emergency rabies vaccination:
a) pregnancy; *c) fever;* *e) all variants are listed.*
в) chronical hepatitis; *d) hydrophobia;*

16. Rabies vaccine includes:
a) alive attenuated wild rabies virus; *d) inactivated vaccine strain;*
b) inactivated wild rabies virus; *e) antirabies immunoglobulin.*
c) alive vaccine strain;

17. In mumps nidi immunization is administrated
a) until 7th day of the first patient detection; *d) till 35 years' old;*
b) during 21 days of medical observation; *e) is not realized.*
c) till 14th years old;

18. Name the most effective measure concerning enteric infections
a) planned immunoprophylaxis; *d) distractive deratisation;*
b) preventive deratisation; *e) emergency immunoprophylaxis.*
c) disinfection;

19. Typhoid fever prevention is realized with
a) bacteriophage; *d) chemical vaccine;*
b) inactivated and attenuated vaccines; *e) toxoid.*
c) chemical and inactivated vaccines;

20. Emergency immunoprevention against tetanus is realized with
a) DTP; *c) tetanus toxoid, antitetanus serum and antitetanus human ig;*
b) DTaP; *d) diphtheria and tetanus toxoids;*
e) antitetanus serum and antitetanus human ig.

21. The most effective prevention of occupational contagion with VHB is

a) active immunoprophylaxis with recombinant vaccine;

b) sterilization of medical instruments;

c) be wary with surgical instruments;

d) passive immunoprophylaxis with ig;

e)usage of protective clothing, rubber gloves and eyeglasses.

22. A 16-year-old adolescent living in a rural area has been bitten in the shin by a stray dog. The wound is superficial. Regular vaccination against tetanus was received 3 months ago. What treatment tactics would be the most advisable in this case?

a) antirabies vaccination;

b) antirabies immunoglobulin;

c) tetanus toxoid adsorbed;

d) antitetanus serum;

e) antitetanus immunoglobulin.

23. To assess the effectiveness of medical technologies and determine the power and direction of their effect on the public health indicators, the research was conducted to study the immunization rate of children and measles incidence rate by district. What method of statistical analysis should be applied in this case?

a) calculation of correlation coefficient

b) calculation of morbidity index among the nonvaccinated

b) calculation of coefficient of agreement

d) calculation of standardized ratio

e) calculation of statistical significance of the difference between two estimates.

24. During winter epidemics of influenza caused predominantly by virus A/California/04/2009 (H1N1), on the 2nd day after the disease onset a 30-year-old hospitalized man presented with high fever, dry cough, myalgia, headache, and general weakness. What should be prescribed as etiotropic treatment in this case?

a) neuraminidase inhibitors (Oseltamivir);

b) antibiotics;

c) immunoglobulin;

d) interferon inducers;

e) acyclovir.

25. A 30-year-old woman maces an appointment with the family doctor for scheduled vaccination of her 2-year-old child. What type of healthcare provides such medical services? Which of the following healthcare providers is responsible for this?

a) primary healthcare;

в) emergency aid;

c) secondary healthcare;

d) tertiary healthcare;

e) palliative care.

26. A 32-year-old pregnant woman at the term of 5-6 weeks is vaccinated against influenza along with her whole family. At that time, she is not aware of her pregnancy. The pregnancy is wanted. The woman needs an advice from the family doctor regarding the maintenance of her pregnancy, namely whether there is a risk of fetal malformations because of received vaccination. Which of the following advice should the doctor give in this case?

a) vaccination against influenza is safe during pregnancy;

b) therapeutic abortion is recommended;

c) immediate ultrasound of the lesser pelvis is necessary;

d) test for antibodies against influenza virus is necessary;

e) an infectious diseases specialist must be consulted.

27. A 15-year-old girl with systemic lupus erythematosus and has been receiving prednisolone therapy in the daily dosage of 2 mg/kg for the last 6 weeks. The plans are made to gradually lower the dosage of the medicine. No clinical signs of her disease are observed. Previously she has received no immunization against measles. Due to measles outbreak it is necessary to develop the immunity against this infection in the patient. Which of the following is the correct term of her vaccination?

a) at the present time;

b) after 2 weeks of prednisolone therapy in the dosage lower than 2 mg/kg/24 hours;

c) 1 month after the prednisolone therapy is complete;

d) immediately after the prednisolone therapy is complete;

e) never due to medical contraindications.

28. A 45-year-old veterinary worker has made an appointment with the doctor for regular examination. In his duties he frequently deals with animals, however he denies working with rabies-affected animals. Previously he has received no antirabies vaccination. The doctor should recommend which of the following?

a) preventive immunization with antirabies vaccine;

b) vaccination in case of contact with sick animal;

c) preventive immunization with rabies immunoglobulin;

d) administration of antirabies vaccine and rabies immunoglobulin;

e) preventive immunization with anti-rabies serum.

29. A healthy child 1 year and 5 months of age is being vaccinated against hepatitis B. The child did not receive the first dose of the vaccine previously, while in the maternity hospital. The doctor makes an individual vaccination schedule for this child and plans the administration of the next dose of the vaccine. The minimum interval between doses of vaccine in this case is which of the following?

a) 1 month; b) 2 months; c) 3 months; d) 6 months; e) 12 months.

30. A 45-year-old woman has been suffering from rheumatoid arthritis for 10 years and takes methotrexate twice a week. What of the following statement regarding vaccination against pneumococci (23-valent vaccine) would conform to the recommendations for the management of rheumatoid arthritis issued by the European League Against Rheumatism in 2010?

a) vaccination is recommended;

b) vaccination is not recommended;

c) vaccination is contraindicated to the patients who take methotrexate;

d) vaccination is contraindicated in cases when inflammatory process is active;

e) vaccination necessitates increase in the dosage of the long-term medicines.

31. A 65-year-old woman was diagnosed with the following: chronic rheumatic heart disease, I degree of rheumatic activity; combined mitral heart disease with prevalence of III-degree stenosis; heart failure IIA with retained left ventricular ejection fraction, functional class III (NYHA). Which of the following tactics of vaccination against respiratory infections should be chosen to provide secondary prevention of exacerbations and to avoid heart failure decompensation in this patient?

a) Scheduled yearly vaccination against influenza and pneumococci;
b) vaccination should be combined with antibiotic administration ;
c) vaccination is contraindicated due to severe heart failure ;
d) any vaccination is contraindicated due to elderly age of the patient ;
e) any vaccination is contraindicated due to mitral valve disease.

32. A 69-year-old woman was diagnosed with the following: ischemic heart disease; stable exertional angina pectoris, FC III; heart failure IIA with retained left ventricular ejection fraction, functional class III (NYHA). Which of the following vaccine should be chosen for influenza prevention and to avoid destabilization of the patient's condition?

a) type of influenza vaccine is not important;
b) inactivated influenza vaccine (IIV);
c) recombinant influenza vaccine (RIV);
d) vaccination is contraindicated due to severe heart failure ;
e) vaccination is contraindicated due to elderly age of the patient.

33. A 60-year-old man presents with subcompensated viral liver cirrhosis (HCV), Child-Pugh class B. Which of the following tactics should be chosen regarding the vaccination against influenza in this case?

a) scheduled yearly vaccination;
b) in case of influenza outbreak;
c) combined with antiviral drugs;
d) contraindicated due to disease progression stage, as shown by Child-Pugh class;
e) contraindicated due to elderly age of the patient.

34. A 20-year-old student was brought to the first-aid center. He has a closed fracture of the left forearm and a contused lacerated wound on his left shin. After the patient received initial wound management, he presented the documents confirming that he has received all the necessary preventive vaccination as scheduled. Which of the following advice should the doctor give to prevent tetanus in this patient?

a) dynamic case monitoring;
b) administration of tetanus immunoglobulin;
c) administration of anti-tetanus serum;
d) antibiotic therapy ;
e) administration of tetanus toxoid.

35. A 17-year-old girl has made an appointment with the doctor. She plans to begin her sex life. No signs of gynecological pathology were detected. In the family history there was a case of cervical cancer that occurred to the patient's grandmother. The patient was consulted about the maintenance of her reproductive health. Which of the following recommendations will be the most helpful for prevention of invasive cervical cancer?

a) vaccination against human papillomavirus (HPV);
b) vitamins, calcium, omega-3;
c) immunomodulators;
d) antiviral and antibacterial drugs;
e) timely treatment of sexually transmitted diseases.

36. A 6-month-old infant is not vaccinated. The physician recommends a DPT (diphtheria, pertussis, tetanus) vaccination but the mother is absolutely against this procedure. Which of the following argument is the most substantial in favor of vaccination?

a) risk of lethal consequences;
b) epidemic risk for the others;
c) personal professional experience;
d) high quality of vaccines;
e) possible risk of infection.

37. In autumn a 45-year-old man was recommended an elective surgery for coronary artery bypass grafting due to multivessel coronary artery disease. The patient has never received anti-influenza vaccination. Which of the following reason would the family doctor offer a scheduled yearly vaccination against influenza to this patient?

a) decrease the risk of mortality due to pneumonia and heart failure;
b) secondary prevention of exacerbations of chronic ischemic heart disease;
c) immunoprophylaxis of postoperative pulmonary complications;
d) primary prevention of influenza during postoperative care;
e) prevention of seasonal influenza.

38. A 28-year-old woman has made an appointment with the family doctor to receive vaccination against influenza. However, having collected the patient's medical history, the doctor claimed this procedure to be absolutely contraindicated for this woman. Which of the following anamnestic data is the absolute contraindication to vaccination?

a) egg white intolerance;
b) pregnancy at 30 weeks;
c) blood hemoglobin – 109 g/L;
d) body temperature – 37.2 °C;
e) psoriasis in the remission phase.

39. A 26-year-old man complains of chills, rhinitis, dry cough, and fever up to 38 °C. Examination shows him to be in a moderately severe condition; there are small pale pink non-merging spots on the skin of his back, abdomen, and extremities. Palpation reveals enlarged occipital and axillary lymph nodes. No information about vaccination history could be obtained. Which of the following etiology of this disease is the likely?

a) rubella virus;
в) epstein-Barr virus;
c) streptococcus;
d) mumps virus;
e) neisseria meningitis.

40. During administration of planned DPT vaccination the child suddenly developed acute anxiety, signs of pain response, dyspnea, grunting respirations, cutis marmorata, cold sweat. Objectively the child's consciousness is disturbed, heart rate is 150/min., blood pressure is 60/40 mm Hg, heart sounds are muffled. The child was diagnosed with anaphylactic shock. Which of the following drug should be administered first?

a) epinephrine;
b) lasix (Furosemide);
c) suprastin (Chloropyramine);
d) euphylline (Aminophylline);
e) analgin (Metamizole).

41. Among first-year schoolchildren there was a case of measles registered. A 7-year-old boy from the same group was not vaccinated against measles due to refusal of his parents. His clinical history has no cases of measles in the past and is not contraindicatory to immunobiological agents. Which of the following tactics of measles prevention is the most rational in this schoolboy:

a) measles-Mumps-Rubella vaccine;
b) isolation for 21 days;
c) antiviral agents;
d) antibiotics;
e) immunomodulators.

42. A 40-year-old man developed fever up to 37.5^{o}C and macular rash 10 days after the first dose of MMR (Measles-Mumps-Rubella) vaccine was administered. The vaccination was considered necessary as there was a measles outbreak in the city and the patient had not received MMR vaccination in his childhood. Is revaccination with MMR vaccine possible?

a) possible;
b) forbidden;
c) after a course of glucocorticoids treatment ;
d) simultaneously with antihistamines;
e) under supervision in the infectious diseases inpatient ward.

43. A 26-year-old man is undergoing a regular check-up. One year ago he had a case of tonsillar diphtheria complicated with myocarditis. Presently his condition is satisfactory, no signs of cardiovascular failure; ECG shows first degree atrioventricular block. Which of the following vaccine was administered to this man according to his age?

a) adsorbed diphtheria tetanus vaccine (modified);
b) acellular DPT vaccine;
c) tetanus anatoxin;
d) oral polio vaccine (OPV);
e) BCG vaccine.

44. A 4-year-old boy was vaccinated in violation of his vaccination schedule. There are complaints of pain in the throat during swallowing, headache, inertness, fever. Objectively: the child is pale; anterior cervical lymph nodes are enlarged; tonsils are swollen, with cyanotic hyperemia, and covered with grey-white coating that cannot be removed; if it is forcibly removed, tonsils bleed. Which of the following diagnosis is the most likely:

a) oropharyngeal diphtheria;
b) lacunar tonsillitis;
c) pseudomembranous (Vincent's) tonsillitis;
d) infectious mononucleosis;
e) follicular tonsillitis.

45. A toxin neutralized with 0.4 % formaldehyde under 37–40 °C for 4 weeks is used for vaccination. This preparation was first used by Gaston Ramon for diphtheria prevention. Which of the following preparation is:

a) anatoxin;
c) antitoxic serum;
e) inactivated vaccine.
в) immunoglobulin;
d) adjuvant;

46. First-year schoolchildren have received tuberculin skin test (Mantoux test) at the school nurse's office. Which of the following purpose of this test is:

a) to determine the children with tuberculin test bends;
b) to preventively vaccinate against tuberculosis;
c) to measure immunity stress toward diphtheria;
d) to measure allergization rate toward rickettsia;
e) to detect parotitis in the schoolchildren.

47. Various biological preparations can be used for poliomyelitis prevention. Which of the following drug induces the type of local intestinal mucosal immunity that lasts the longest?

a) oral vaccination with live vaccine
b) parenteral vaccination with inactivated vaccine
c) oral introduction of poliovirus-specific immunoglobulin
d) parenteral vaccination with live vaccine
e) parenteral introduction of normal human immunoglobulin

48. Preventive vaccination against poliomyelitis is made with inactivated vaccine introduced parenterally. Which of the following immunoglobulins create the postvaccinal immunity in this case?

a) IgM, IgG;
в) IgG, secretory IgA;
c) IgM, secretory IgA;
d) serum IgA, IgM;
e) IgE, IgM.

49. A 6-year-old child with suspected active tuberculous process has undergone diagnostic Mantoux test. Which of the following immunobiological preparation is injected?

a) tuberculin;
в) DTP vaccine;
c) BCG vaccine;
d) tularinum;
e) Td vaccine.

50. In a village a case of anthrax has been registered. Medical services began epidemiologically indicated specific prophylaxis of population against anthrax. Which of the following preparation is used for this purpose?

a) live vaccine;
в) inactivated vaccine;
c) chemical vaccine;
d) genetically engineered vaccine;
e) anatoxin.

EPIDEMIOLOGY AND PREVENTION OF INFECTIONS WITH AEROSOL TRANSMISSION MODE (DIPHTHERIA, PERTUSSIS, MENINGOCOCCAL DISEASE, MEASLES, MUMPS, RUBELLA, CHICKENPOX)

1. Name respiratory infections with additional modes of transmission

a) flu;
b) meningococcal disease;
c) pertussis;
d) diphtheria and tuberculosis;
e) rubella and mumps.

2. Where is the meningitis belt location?

a) sub-Saharan Africa;
b) southern Africa;
c) antarctic;
d) latin America;
e) central Asia.

3. Before discharge diphtheria convalescents are bacteriologically examined

a) once;
b) examine in agreement with epidemiologist;
c) two times;
d) three times;
e) not examine.

4. The source of mumps is

a) patient with severe form of disease;
b) patient with atypical form of disease;
c) patient with mild form of mumps;
d) person with inapparent mumps;
e) all listed.

5. The highest variability of antigenic structure is inherent to

a) influenza type A;
в) influenza type B;
c) measles;
d) mumps;
e) chickenpox.

6. Air-dust route of transmission is possible for

a) flu; *в) measles;* *c) shigellosis;* *d) diphtheria;* *e) malaria.*

7. Pertussis is

a) sapronotic disease;
b) zoonotic;
c) anthroponotic;
d) zooanthroponotic disease;
e) helminthosis.

8. What is the MMR vaccine?

a) mixture of three inactivated measles, mumps and rubella viruses;
b) vaccine against malaria, measles and rabies;
c) multi-component vaccine against measles, mumps and rabies;
d) combined vaccine against malaria, mumps and rubella;
e) combined vaccine contains live attenuated measles, mumps and rubella viruses.

9. Name persistent pathogen

a) B. pertussis; *c) measles' virus;* *e) N. meningitides.*
в) B. parapertussis; *d) Cl. diphtheria;*

10. The source of diphtheria is:

a) patient with diphtheria of throat;
b) patient with cutaneous form of diphtheria;
c) convalescent during the first 10 days;
d) patient with membranous nasal diphtheria;
e) all listed.

11. Name anthroponotic disease

a) diphtheria; *c) pertussis;* *e) all listed.*
в) meningococcal disease; *d) mumps;*

12. The main factor in transmission of respiratory infections is

a) water; *b) meal;* *c) air;* *d) dirty hands;* *e) fly.*

13. The transplacental mode of transmission is available for

a) diphtheria and mumps;
b) meningococcal disease and measles;
c) pertussis and parapertussis;
d) rubella and chickenpox;
e) pertussis and diphtheria .

14. The source of meningococcal disease is

a) healthy carrier; *d) infected lice;*
b) infected chicken; *e) all listed.*
c) contaminated objects of the environment;

15. Name the contagion period for chickenpox

a) during 10 days after rash appearance;
b) from 5 days before rash appearance to 5 days thereafter;
c) from 2 days before rash appearance to 5 days thereafter;
d) during 30 days before rash appearance;
e) patient with smallpox is non-contagious during whole period of disease.

16. The causative agent of diphtheria was found by

a) I. Mechnikov; *d) E. Klebs and F. Loeffler;*
b) R. Koch; *e) E. Jenner.*
c) L. Paster and F. Loeffler;

17. Name measures are directed to the sources of diphtheria
a) disinfection;
b) hospitalization;
c) medical supervision during 7 days after definitive diagnosis of diphtheria;
d) cleaning of the hospital environment;
e) all listed.

EPIDEMIOLOGY AND PREVENTION OF INFECTIONS WITH FECAL-ORAL TRANSMISSION MODE (SHIGELLOSIS, TYPHOID FEVER, VIRAL HEPATITIS A AND E)

1. The contagious period of shigellosis is
a) incubation period;
b) the first days of illness;
c) manifestation period;
d) convalescent period;
e) during all period .

2. The transmission mode of enteric diseases is realized via
a) water-borne, food-borne and sexual routes;
b) food-borne, air-droplet and air-dust routes;
c) food-borne, water-borne and household contact;
d) air-droplet, sexual and air-nuclear routes;
E) transplacental, water-borne and air-dust routes.

3. Chronic carrier state of typhoid is confirmed by pathogen detection inside
a) cerebrospinal fluid;
в) blood;
c) excrement;
d) bile;
e) sputum.

4. Effective laboratory method of typhoid diagnostic at early period of disease is
a) hemoculture;
в) coproculture;
c) urine culture;
d) Widal test;
e) bile inoculation.

5. Name viral hepatitis with fecal-oral mode of transmission
a) A and E;
в) A and B;
c) A and D;
d) B and C;
e) B and D.

6. The high risk group of viral hepatitis A is
a) unorganized children;
b) children attend child care institutions;
c) newborn babies;
d) patients in somatic hospitals;
e) persons aged 60 and elder.

7. Duration of medical supervision in the shigellosis nidus is
a) 32 days;
b) 51 days;
c) 45 days;
d) 35 days;
e) 7 days.

8. Duration of medical supervision in the nidus of viral hepatitis A is
a) 21 days; b) 51 days; c) 7 days; d) 45 days; e) 35 days.
9. The epidemiologically dangerous source of typhoid fever is
a) healthy carrier; c) acute carrier; e) all listed.
в) sick person; d) chronic carrier;
10. The causative agent of viral hepatitis A is detected inside
a) liquor; b) feces; c) urine; d) bile; e) saliva.
11. What is NOT the factor of salmonellosis transmission?
a) chicken eggs; c) milk; e) fly.
в) infected person; d) dirty hands;
12. Name epidemiological feature of water-borne outbreak
a) monoetiologic diseases;
b) severe clinical course of detected diseases;
c) low morbidity level;
d) polyetiologic diseases;
e) all listed.
13. Duration of mandatory medical check-up for public catering workers with typhoid in anamnesis
a) 1 year; b) lifelong; c) 6 months; d) 1 month; e) 3 months.
14. Shigellosis, typhoid and hepatitis A are belonging to
a) zoonosis; c) zooanthroponosis; e) anthroponosis.
в) protozoosis; d) sapronosis;
15. The source of shigellosis is
a) infected cattle; c) infected human; e) contaminated water.
в) contaminated milk; d) infected hen;
16. The causative agents of typhoid and paratyphoid are belonging to
a) bordetella; в) shigella; c) salmonella; d) clostridia; e) ecsherichia.
17. Name effective antiepidemic measure in the nidus of dysentery
a) bacteriological; d) focal disinfection;
b) medical supervision; e) immunoprophylaxis.
c) deratization;
18. The source of typhoid is
a) ill person; c) fly and dirty hands; e) human and cattle.
в) water and food; d) ill person and fly;
19. The leading route of S. Flexneri transmission is
a) food-borne; c) house-hold contact; e) water-borne.
в) air-droplet; d) air-dust;
20. The leading route of S. Sonnei transmission is
a) food-borne; c) house-hold contact; e) water-borne.
в) air-droplet; d) air-dust;

EPIDEMIOLOGY AND PREVENTION OF INFECTIONS WITH VECTOR-BORNE TRANSMISSION MODE (MALARIA, EPIDEMIC TYPHUS)

1. Name the causative agent of blood infection
a) clostridium tetani; *d) plasmodium malaria;*
b) mycobacterium tuberculosis; *e) gardia lamblia.*
c) entamoeba histolytica;

2. A disease that is transmitted by alive transmitter is called
a) water-borne; *c) vehicle-borne;* *e) food-borne.*
в) vector-borne; *d) air-borne;*

3. Name the sexual reproductive phase of the malaria parasites
a) by binary fission; *c) sporogony;* *e) shizogony.*
в) copulation; *d) mitosis;*

4. Name the definitive host of malaria
a) human; *c) mosquito;* *e) tick.*
b) louse; *d) monkey;*

5. Name the specific transmitter of epidemic typhus
a) tsetse fly; *c) tick;* *e) flea.*
b) sand fly; *d) louse;*

6. Enumerate vector-born infections
a) shigellosis, paratyphoid, typhoid fever;
b) malaria, Q-fever, viral hepatitis A;
c) Q-fever, viral hepatitis D, dysentery;
d) AIDS, malaria, endemic typhus;
e) malaria, epidemic typhus, sleeping sickness.

7. What is true about Brill's disease
a) relapse of epidemic typhus; *d) zoonosis;*
b) relapse of malaria; *e) all listed.*
c) causative agent is R. Rickettsia;

8. Seasonal pattern of epidemic typhus is
a) summer-autumn; *c) winter-spring;* *e) summer-winter.*
в) autumn-winter; *d) spring-summer;*

9. Duration of medical supervision in the nidi of epidemic typhus is
a) 10 days after patient isolation;
b) 25 days after patient isolation;
c) 25 days after focal disinfection;
d) 17 days after exposure with infected person;
e) lifelong.

10. Name the causative agent of epidemic typhus
a) R. Rickettsii; *c) S. Typhi;* *e) R. Tsutsugamushi.*
в) R. Typhy; *d) R. Prowazekii;*

11. Enumerate antiepidemic measures in the nidi of epidemic typhus
a) fight pediculosis with permethrin;
b) prescription of phenylbutazone for persons elder than 4-year-old;
c) chemoprevention with doxycycline, tetracycline or rifampicin;
d) chamber disinsection of wear, bed clothes and etc.;
e) all listed.

12. P. malaria causes
a) chagas disease;
в) Q-fever;
c) malignant tertian malaria;
d) quartian malaria;
e) tertian malaria.

13. Enumerate possible routes of malaria transmission
a) fecal-oral, contact and aerosol;
b) transplacental, artificial and fecal-oral;
c) intranatal, aerosol and vector-borne;
d) contact, vector0borne and aerosol;
e) transplacental, vector-borne and artificial.

14. Malaria is
a) sapronosis;
в) anthroponosis;
c) zoonosis;
d) zooanthroponosis;
e) nosocomial infection.

15. Tertian malaria is caused by
a) P. Ovale, P. Falciparum, P. Vivax;
b) P. Malaria, P. Falciparum, P. Ovale;
c) P. Falciparum, P. Vivax, P. Malaria;
d) P. Knowlesi, P. Vivax, P. Malaria;
e) P. Ovale, P. Vivax, P. Mexicanum.

16. Name the reproductive phase of the malaria parasites
a) by binary fission;
в) copulation;
c) sporogony;
d) mitosis;
e) fshizogony.

17. Name the specific transmitter of malaria
a) male mosquito Anopheles;
b) female sand fly;
c) female mosquito Culex;
d) body (clothes) louse;
e) female mosquito Anopheles.

18. Name optimal temperature for the malaria parasites development inside mosquito
a) higher than 30 °C;
в) below 16 °C;
c) ; between 16 °C and 20 °C
d) from 20 °C to 30 °C;
e) 16 ° C.

19. The highest indices of malaria morbidity and mortality are registered in
a) america;
в) africa;
c) east Mediterranean;
d) europe;
e) western Pacific.

20. What is the spleen rate?

a) a percentage of children aged 2-10-year-old with splenomegaly;
b) a percentage of babies under 1-year-old with splenomegaly;
c) a percentage of babies under 1-year-old with malaria parasites in blood films;
d) a percentage of children aged 2-10-year-old with malaria parasites in their blood films;
e) nothing of above enumerated.

EPIDEMIOLOGY AND PREVENTION OF INFECTIONS WITH CONTACT TRANSMISSION MODE (TETANUS, RABIES, ANTHRAX, VIRAL HEPATITIS B, D AND C, HIV INFECTION)

1. In boiling water spores of C. Tetani survive during

a) 1 minute; *c) 15–30 minutes;* *e) 2–3 hours.*
b) 5–10 minutes; *d) 30–60 minutes;*

2. Vertical route of transmission is possible

a) japanese Encephalitis; *c) poliomyelitis;* *e) mumps.*
в) HIV-infection; *d) pertussis;*

3. Tetanus development is possible when

a) intact skin is contaminated with spores of C. Tetani;
b) intact mucosal membranes are contaminated with C. Tetani;
c) C. Tetani enters into the human digestive system;
d) damaged external integuments are contaminated with C. Tetani;
e) all listed.

4. The source of rabies is

a) house mouse; *b) flea;* *c) dog;* *d) water;* *e) soil.*

5. Name the mode of tetanus transmission

a) aerosol; *в) contact;* *c) vector-borne;* *d) fecal-oral;* *e) all listed.*

6. Name the causative agent of anthrax

a) C. Botulinum; *c) C. Tetan;* *e) C. Diphtheria.*
в) B. Anthraces; *d) E. Coli;*

7. Name the transmission modes of viral hepatitis B

a) fecal-oral and aerosol; *d) fecal-oral and vertical;*
b) contact and blood-born; *e) vector-borne and fecal-oral.*
c) aerosol and vector-borne;

9. HIV infection IS NOT transmitted by

a) sexual route; *c) blood transfusion;* *e) air.*
в) injection; *d) surgical instrument;*

10. Name biological fluids contain human immunodeficiency virus

a) sperm; *c) vaginal discharge;* *e) all listed.*
в) blood; *d) breast milk;*

11. Rabies is usually transmitted by a bite from an infected animal. Name localizations of bite wounds are the most dangerous for human

a) trunk, buttock, shoulder;
b) head, neck, trunk, inguinal region;
c) head, neck, food, hand, inguinal region;
d) head, neck, femur, forearm, inguinal region;
c) trunk, buttock, shoulder, neck.

12. Name the transmission modes of viral hepatitis C

a) a) fecal-oral and aerosol;;
b) contact and artificial;
c) aerosol and vector-borne;
d) fecal-oral and vertical;
e) vector-borne and fecal-oral.

13. Exclude wrong property of C. Tetani

a) forms spores in soil;
b) inhabits cattle intestines;
c) produces exotoxin;
d) causes wound infection;
e) produces endotoxin.

14. How long does hepatitis B virus survive inside frozen blood products?

a) 1 week;
b) 1 month;
c) 6 months;
d) 2–5 years;
e) 15–20 years.

15. Name the usual mode of anthrax transmission from animal to human

a) aerosol;
b) fecal-oral;
c) vertical;
d) contact;
e) victor-borne.

16. Who is at the high risk of anthrax

a) teachers, physicians, tram conductors;
b) veterinaries, cattle farmers, builders;
c) builders, veterinaries, pilots;
d) veterinaries, cattle farmers, butchers;
e) veterinaries, teachers, milkmaids.

17. Viral hepatitis D is

a) coinfection of viral hepatitis B;
в) defective RNA virus;
c) parenteral hepatitis;
d) delta hepatitis;
e) all listed.

18. The reservoir of tetanus is

a) herbivores, rodents and soil;
b) birds, milk and water;
c) humans, carnivores and vegetables;
d) birds, rodents and fruits;
e) carnivores, soil and milk.

19. What are the serologic markers of viral hepatitis B?

a) IgA, Ig E, IgG;
b) anti-HBS, anti-HBc, F protein;
c) HBsAg, anti-HBs, anti-HBc;
d) HBs, Ig E, anti-HBc;
e) HBsAg, IgM anti-HBc, IgA.

20. What IS NOT HIV test?

а) ELISA;
б) western blot;
c) PCR;
d) OraQick rapid HIV test;
e) agglutination test.

EPIDEMIOLOGICAL METHOD PLANNING ANTIEPIDEMIC AND PREVENTIVE MEASURES. ANALYTICAL AND EXPERIMENTAL METHODS IN EPIDEMIOLOGY

1. Morbidity level of anthroponotic diseases in human population depends on

a) activity of transmission mode;
b) presence of bacteria carriers;
c) variability of pathogen;
d) level of population immunity;
e) all listed.

2. Exotic morbidity is

a) isolated cases don't connect each other;
b) diseases are constantly registered at the particular region;
c) unusual diseases are brought in from abroad by immigrants or travellers;
d) flu outbreak;
e) epidemic spread of tuberculosis.

3. Epidemiological diagnostics is

a) recognition of features of epidemic process, that characterizes epidemiological situation;
b) usage of epidemiological method for working of theoretical medical problems;
c) statistic processing of results of clinical investigations;
d) element of economic analysis in the medical institutions;
e) working of statistical methods for using in the epidemiology.

4. Name extensive epidemiological index

а) morbidity;;
б) case fatality rate;
c) mortality;
d) prevalence;
e) all listed.

5. Case fatality rate is

a) the proportion of the total number of events at particular time per 10n of population;
b) 9 cases of measles per 100 000 populations;
c) the proportion of new events in specified period per 10n of population;
d) the ratio of deaths to cases;
e) a fatal outcome of a disease.

6. Sporadic morbidity is

a) isolated cases don't connect each other;
b) diseases are constantly registered at the particular region;
c) unusual diseases are brought in from abroad by immigrants or travellers;

D) the ratio of deaths to cases;
E) epidemic spread of flu.

7. Enumerate epidemiologist activities
a) organizational-methodical; *c) antiepidemical;* *e) all listed.*
b) preventive; *d) analitycal;*

8. What is seasonal pattern?
a) annual morbidity dynamics; *d) high risk population group;*
b) many-year dynamics of morbidity; *e) high risk area.*
c) age morbidity structure;

9. Clinical effectiveness of immunization is illustrated by
a) clinical course of disease;
b) reduce expenses are connected with population morbidity;
c) percentage of persons with protective level of antibodies;
d) morbidity rate for vaccinated persons;
e) all variants are listed.

10. Morbidity level of zoonotic diseases in human population depends on
a) all listed; *d) activity of epizootic process;*
b) natural resistance; *e) level of population immunity.*
c) presence of specific transmitters;

11. Enumerate parts of epidemiological diagnostic
a) epidemiological semiotics, epidemiological monitoring and epidemiological control;
b) epidemiological semiotics, epidemiological technique and epidemiological monitoring;
c) epidemiological semiotics, epidemiological technique and epidemiological thinking;
d) epidemiological thinking, epidemiological semiotics and epidemiological control;
e) epidemiological semiotics, epidemiological technique and epidemiological analysis.

12. Epidemiological surveillance is
a) regular monitoring of epidemic process of particular disease and analyzing the epidemiological situation of specified area and period of time;
b) analysis of annual morbidity dynamics and age morbidity structure;
c) study of quantitative and qualitative manifestations of epidemic process;
d) usage of epidemiological method for working of theoretical medical problems;
e) element of economic analysis in the medical institutions.

13. Name types epidemiological analysis
a) operative and mathematical analyses;
b) retrospective and mathematical analyses;
c) mathematical and immune-enzyme analyses;
d) operative and retrospective analyses;
e) biochemical and immune-enzyme analyses.

14. Choose right sequence of epidemiological surveillance stages

a) design of antiepidemic measures → data acceptance with following retrospective epidemiological analysis → correction of planned measures → current epidemiological analysis;

b) data acceptance with following retrospective epidemiological analysis → →design of antiepidemic measures → current epidemiological analysis→ → correction of planned measures;

c) correction of planned measures → design of antiepidemic measures → data acceptance with following retrospective epidemiological analysis → current epidemiological analysis;

d) current epidemiological analysis → correction of planned measures → → design of antiepidemic measures → data acceptance with following retrospective epidemiological analysis;

e) data acceptance with following retrospective epidemiological analysis → → correction of planned measures → design of antiepidemic measures→ → current epidemiological analysis.

15. What is the cohort study?

a) systematic follow-up for a defined period of time or until the occurrence of a specified event;

b) study of immunity and all of the phenomena are connected with the defence mechanisms of the body;

c) study of the occurrence, distribution, and control of infectious diseases in populations;

d) study of data on the group's exposure and disease experience are already known;

e) systematic study of a group of people, which may be conducted prospectively or retrospectively.

16. Name types of epidemiological experimental researches

a) randomized controlled trials, functional trials, cohort study;

b) field trials, randomized controlled trials, community trials;

c) community trials, descriptive study, clinical trials;

d) field trials, case-control study, randomized controlled trials;

e) descriptive study, cohort study, cross-sectional study.

17. Epidemiological researches can be classified as

a) observational and experimental study;

b) experimental study and clinical trials;

c) observational study and clinical trials;

d) clinical and laboratory research;

e) functional and clinical trials.

18. Observational study includes

a) descriptive, analytical, case-control, cross-sectional and cohort studies;

b) experimental and cohort studies, clinical and laboratory research;

c) field trials, case-control study, randomized controlled trials and cohort study;

d) descriptive, analytical, case-control, cross-sectional studies and clinical trials;

e) field trials, randomized controlled trials, community trials.

19. Exactness of sampling study is estimated by

a) representativeness, authenticity, generalization and repeatability;

b) representativeness, specificity, generalization and repeatability;

c) statistical control, authenticity, generalization and repeatability;

d) representativeness, authenticity, quality of diagnostic and repeatability;

e) geometric middling, authenticity, generalization and repeatability.

20. Incidence rate is

a) the proportion of the total number of events at particular time per 10n of population;

b) the ratio of deaths to cases;

c) the proportion of new events in specified period to the average number of persons exposed to risk during this period per 10n;

d) extensive epidemiological index;

e) case fatality rate.

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