

Task 1

Patient P., 50 years old, complaints of severe weakness, fatigue, decreased ability to work, irritability, sleep disorder, sweating. The patient noted the inability to perform his work in the presence of others, accompanied by a strong anxiety, reddening of the face, sweating. Patient worked as a master of a mercury shop for 25 years under the influence of mercury vapor (confirmed by records in the work book). During the examination: the skin is wet, poured persistent red dermographism, abdominal pain.

1. Formulate and confirm the diagnosis. Plan of treatment.

Task 2

The patient 45 years old, irrigated fruit trees and grain crops with pesticides. Previously, nothing was sick. Do not smoke. After some time eyes were swollen, headache. there was a runny nose with a clear discharge from the nose, sneezing. Soon joined a dry cough, periodically difficult exhalation, headache, dizziness, increased fatigue, worsening of sleep, decreased memory, irritability. With objective examination: hyperemia of the mucous membranes of the eyes and nose, in the lungs hears the dry wheezing. Hyperhidrosis, a slight tremor of fingers, pain in the course of nerve trunks, and the liver is palpated 2 cm below the costal arc.

1. Formulate and confirm the diagnosis. Plan of treatment.

Task 3

Patient M., a battery-charger, entered the department of occupational pathology after periodical medical examination, where, against the background of complaints of weakness and fatigue in the analysis of urine, an elevated level of coproporphyrin (++++) was detected. When he arrived in the hospital, he complained of pain, numbness in the limbs, weakness, fatigue, headache, sweating, cramps of the calf muscles. During the examination, the earth color of the skin was revealed, a narrow lilac-gray strip, hyperhidrosis, hypothermia, muscular hypotension, retardation of dermographism, and decreased sensitivity of the distal limbs of the polyneuritic type were revealed on the edge of the gums of the forearms. General blood test: hypochromic anemia, reticulocytosis.

Formulate the diagnosis. Plan of treatment.

Task 4

Patient K. worked for 15 years in the production of high quality electrodes. During the annual medical examination, he complains of increased fatigue, drowsiness,

paresthesia, some decrease in limb strength, sweating, salivation. At examination and communication with the patient there is drowsiness, apathy, lack of critical attitude to his condition. The position of the patient: the head and trunk are inclined forward, the chin collides with the breast. Hypomimia, monotonous speech, micrography, limb tremor, bradykinesia, pro- and retro pulse. In the psychological study revealed a decrease in the range of interests, disorganization of mental processes.

1. Formulate and confirm the diagnosis.
2. How to treat this intoxication.

Task 5

Patient T., 43 years old, complains of dry cough, occasionally with small amount of mucosal sputum, which disturbs the patient for about 3 years. For medical help did not address. In the anamnesis of rare respiratory diseases (on average 1 time in three years). Do not smoke. Objectively: the chest of the usual form, the percussion sound in the lower parts of the lung with a box tint. Breathing vesicular, diffusely weakened, periodically heeded scattered dry wheezing. On the x-ray of the lungs is a slight increase in pulmonary pattern. The function of external respiration is within normal limits. According to the patient, he worked for 15 years as a cutter in the foundry workshop at the machine-tool enterprise.

1. Preliminary diagnosis. What information is required to confirm the diagnosis? Plan of treatment.

Task 6

Patient K. was delivered to the resuscitation department by an ambulance team with complaints of a feeling of compression in the chest and a lack of air, a cough with the withdrawal of a large amount of foam sputum. From the anamnesis it is known that the patient works at the enterprise for the production of plastic windows and other products from polymers. On the day of receipt at the plant in the workshop, where the patient worked, there was a burning of products and output polymer components. The patient was subjected to the effects of combustion products (thermal destruction of polymers) within half an hour. After inhaling the combustion products, patient felt burning in the nasal cavity, nasopharynx, behind the sternum. After inhaling the combustion products, the patient experienced burning in the nasal cavity, nasopharynx, and the sternum. After 4 hours there was shortness of breath, dry cough. When examined in the hospital, the patient is excited, acrocyanosis, respiration - 30 per minute. When auscultation against the background of weakened breathing, a large number of small- and medium-rusty wheezes are heeded. In the foam sputum - the impurities

of the blood, breathing swirling. On the x-ray of the chest visible fuzzy blurred pulmonary pattern, against which small, non-intense spotted shadows are found, located in the lower and middle lung parts (flakes of snow that melts).

1. Formulate the diagnosis. Plan of treatment.

Task 7

The patient G., 40 years old, was taken to a pulmonologic department with complaints of intense coughing with mucosal sputum excretion with an admixture of blood, dyspnea of mixed nature, burning in the nasal cavity, pharynx, breast, lacrimation, vassile voices. From the anamnesis it became known that the patient worked as a specialist in chlorination of water in the pool. On this day in the pool the water had a green color and a sharp smell of chlorine. Objective examination revealed: hyperthermia, hyperemia of the mucous membrane of the eye, nasal cavity, pharynx, vocal cords. In the lungs hears the rigid vesicular respiration, a small amount of scattered dry wheezing. On the x-ray of the chest - a small extension of the roots of the lungs and a slight increase in pulmonary pattern.

1. Formulate the diagnosis. Plan of treatment.

Task 8

Patient J., 45 years old, while undergoing a medical examination, complains about headaches, dizziness, memory loss, the appearance of bruises on the torso and limbs that arise without any apparent reason. Given that the patient for 24 years working as a radiologist in the rayon hospital has not always used the means of protection, the probability of exposure to radiation is likely. The patient was sent to the in-patient examination in the department of occupational pathology. At examination in the department osteoporosis, fragility of nails, dryness of a skin, hair loss have been revealed. There were rashes on the skin of the back and extremities, paroxysmal tachycardia. Blood pressure - 110/50 mm Hg, red blood cells - $3,1 \times 10^{12} / l$, leukocytes - $2,1 \times 10^9 / l$, platelets - $60 \times 10^9 / l$, ESR - 23 mm / h.

1. Formulate the diagnosis. Plan of treatment.

Task 9

Patient L., 45 years old, works as a painter at a combine plant, turned to a doctor at the end of the day with complaints of headaches, dizziness, ear cramps, nausea, vomiting, and weakness. When collecting anamnesis, it was found that he initially

repaired a small isolated production room (12 m²). In repair, L. used a solvent taken on the main production (painting plant of the plant). After 4 hours there was weakness, nausea, headache. Continued to work. Within the next two hours, the symptoms intensified. Glistening, noise in the ears joined, there was repeated vomiting. At examination: skin of normal color, pulse of weak filling, tachycardia. When walking is a stumbling block.

1. Formulate a preliminary diagnosis. How to confirm the diagnosis?
2. Plan of treatment.

Task 10

Patient B. 42 years old, farmer. 3 hours ago worked in a warehouse with poison chemicals. Complaints about nausea, vomiting, severe pain throughout the abdomen, tears and salivation, diarrhea. The general condition of the patient is difficult, is inaccurate. Sharp narrowing of the pupils with no reaction to light. Sharp tremor and muscle cramps of the entire body, disorder of the sphincter function. Pronounced bradycardia. The tones of the heart are weakened. Arterial hypotension. When palpation of the abdomen is determined by pain in the epigastric region and right hypochondrium. Blood test: reduction of cholinesterase activity by 50%.

1. Formulate the diagnosis. Plan of treatment.

Task 11

In the clinic of the medical-sanitary part, the patient turned to complaints about aching pain in the forearms, a decrease in the strength of the hands, a feeling of "crawling ants" in the hands and arms of the forearms. From the anamnesis it became clear that the patient for 6 years worked as a cutter of cast-iron casting in the foundry workshop of the machine tool factory. For work uses a pneumatic hammer weighing 6.5 kg with a shock frequency of 1200 per minute. At inspection: brushes of "marble" color, hyperhidrosis of palms.

1. Preliminary diagnosis. Plan of treatment.

Task 12

Patient A. 40 years old for 20 years, working as a worker of the company, which produces slate, contacts with dust containing asbest. The patient complains of shortness of breath during work, cough with discharge of mucous membranes, chest pain, weakness. The general condition of the patient is satisfactory. Skin covers are pale with earthy tint. On the arms and legs – warts. The limits of cardiac dullness are enlarged to the right, the tones are weakened. Percussion over the lungs is a lung sound with a boxed tint. The mobility of the lower limits of the lungs is reduced. Breath is rigid, single scattered wheezing is heard. The vital

capacity of the lungs is reduced. Radiologically: uniform fibrous-heavier eclipse, more in the middle and lower lung departments, emphysema. The roots of the lungs are dilated, weighty. Pleurodiaphragmatic joints are determined.

1. Preliminary diagnosis. Plan of treatment.

Task 12

1. Asbestosis, stage II, interstitial form, emphysema of the lungs.
2. Complications of asbestosis: chronic nonspecific lung diseases, bronchiectasis, lung cancer, pleural mesothelioma.

Task 13

Patient K., 35 years old, works as a cutter of cast-iron casting at a machine-building plant. His duty includes the cutting of large-sized parts, using a pneumatic hammer weighing 6,5 kg. The hammer generates vibration and noise. After 5 years after the start of work, he began to disturb the pain in the forearms, reduced strength in the hands and the severity of hearing on both ears. There was a rhythm of sleep, there was increased irritability and fatigue. Objectively: brushes are dry, normal color, sensitive and trophic lesions are not determined. Vibration sensitivity is not disturbed; cold test negative: capillaroscopy: tendency to venous stasis. At audiometry noted hearing loss. When palpation of the shoulder muscles is noted for pain and sealing areas in them is more right. The pain is aggravated when the physical load on the muscles of the shoulder. From the internal organs of the pathology is not revealed.

1. Establish and justify the diagnosis.

Task 13:

1. Vibrational disease from local vibration. Vegetomyophysicitis syndrome. Professional myositis. Noise sickness.

Task 14

A diver who quickly rose to the surface after 10 minutes of headache, expressed general weakness, pain in the ears, severe shortness of breath, chest pain, feeling of torsion in the abdominal cavity. At examination: skin is pale, palpation pain in the knee joints, pain intensifies when active and passive movements, breathing accelerated superficial, tachycardia, arterial hypotension.

1. Formulate diagnosis. How to confirm the diagnosis?

Task 15

Patient M., 33 years old, has been working as a musician for 9 years. Playing on a piano. Engaged in music every day for 5-6 hours. The patient complains of increasing the tone of the muscles of the brush while playing the piano, a feeling of heaviness and inconvenience in the hands. The last time he tried to play a cramped hand, it did not allow him to continue to play the piano.

1. Formulate the diagnosis. Describe the basic principles of treatment.

Task 16

Patient K., 40 years old, works as a miller. During 11 years he is engaged in the manufacture of incisors made of copper-bonded alloys. In this case, the respiratory protective equipment from dust is used irregularly. Complaints of weakness, increased tension, shortness of breath during loading and an attack-like dry cough that bother him about a year intensively increase after acute respiratory illness. Within a few months he lost weight by 8 kg. The patient does not smoke. At examination there is acrocyanosis, deformation of distal phalanges of fingers, increase of elbow lymph nodes. In the lungs, percussion sounds with a boxed tint, in the lower parts of the rumble of wheezing.

1. Preliminary diagnosis. Plan of examination and treatment.

Task 17

Patient V., 44 years old, has been working on a coal mine for over 17 years. During the medical examination on the X-rays an increase was observed, moderate deformation of the pulmonary pattern in the middle and lower parts of both lungs. In the basal areas, the transparency of the pulmonary fields is elevated. No complaints. The patient noted a dry cough, the appearance of shortness of breath under physical activity, which had not caused shortness of breath before. With objective examination: percussion sound is pulmonary, vesicular breathing, weakened, no wheezing. According to the sanitary-hygienic characteristics of the working conditions, the patient was subjected to a 100% working time exposure of carbon and silicon containing industrial aerosols containing free silicon dioxide. Formulate the diagnosis. Assign treatment and additional examination.

Task 18

Patient K. 46 years old, works as an header, turned to the neurologist complaining of aching pain in the hands and forearms, numbness, paresthesia at rest, increased at night. In addition, there was a feeling of stiffness in the joints and swelling of the small joints of the hands in the morning. The work of the patient is associated with static-dynamic loads on the arm muscles, repeatedly repeated movements of

the hands and their cooling. The patient was sent to the Department of Occupational Pathology for additional examination. The examination revealed cyanosis and hyperemia of the brushes, hyperhidrosis, skin irritation, trophic disturbances on the palmar surface, distal type of sensory impairment. Formulate the diagnosis. What additional research is needed? Assign treatment.

Task 18:

Diagnosis: vegetatively-sensitive polyneuropathy of the upper limbs as a result of functional over-voltage. Examination: rheovasography of the upper extremities, hands thermography, dynamometry, radiography of the brushes.

Treatment: preparations of antispasmodic action and means that improve tissue microcirculation. Massage, balneotherapy, mud therapy, amplipulse, etc.).

Task 19

Patient K., 31 years old, works in a warehouse of poison chemicals. He turned to the neurologist with complaints of increased irritability, headaches, dizziness, memory loss, sleep disturbances, unclear fears, depression, irritability, memory loss, periodically - fever to subfebrile figures, trembling of the body, an attack of hunger, thirst, shortness of breath at low load. In an objective examination - hyperhidrosis, persistent red dermographism, acrocyanosis, increased tendon reflexes, tremor of fingers of elongated hands, language, age, head, nystagmus. When looking at the oral cavity - parodontosis, bleeding gums, their puffiness.

Formulate the diagnosis. Plan of treatment.

Task 20

Patient K., 45 years old, worked for 12 years at the warehouse in contact with various beryllium compounds. Five months ago, the patient appeared complaints of weakness, fatigue, shortness of breath with ordinary walking, pain in the chest in the blades, weight loss, joint pain, myalgia, fever. In the objective examination - 20 respiratory movements per minute, cyanosis, enlargement, parotid and elbow lymph nodes. Lymph nodes sized from peas, soft consistency, mobile painless. Percussion is a pulmonary sound with a boxed shade. When auscultation, the rashes of the lower parts of the lungs are heard, to the right is the noise of friction of the pleura. In spirometry, moderate restrictive changes are detected. On chest X-rays: deformation of the pulmonary picture, multiple diffusely located small-centered shadows, increased bronchopulmonary lymph nodes, and phenomena of perifocal emphysema. The respiratory protective equipment used irregularly.

1. Formulate the diagnosis. Plan of treatment.

Task 20

Diagnosis: chronic berylliosis of stage II, emphysema of the lungs. Pulmonary heart failure degree II.

Treatment: corticosteroid hormones, antihistamines, bronchodilators, mucokinetics, cardiac and anti-inflammatory drugs. Work under the influence of toxic substances, industrial aerosols, adverse weather conditions and physical activity is contraindicated.

Task 21

The patient turned to the doctor with complaints about frequent episodes of albication of nail and major phalanges II-V fingers of the left hand and nail phalanges III-IV of the left hand. These episodes lasted for 30-35 minutes and ended with the restoration of the initial coloration of the skin. In addition, the patient complains of aching pains in the wrists and forearms that increase at night, numbness, chest tightness, pain when moving in the elbow, fibrous joints and interphalangeal joints of the hands. Profession - grinder, seniority of 30 years. When looking hands - cyanotic; palpation of the hand and forearm - cold, hyperhidrosis of the palms. Detected distal hypesthesia by "high gloves" type. The cold test is positive. On reovasography: lowering the pulse blood flow on both sides, increasing arterial tone, and difficulty in venous outflow.

1. Formulate the diagnosis. Plan of treatment.

Task 22

Patient K, 52 years old, an agribusiness employee for many years participated in work with pests of agriculture. At regular gas refueling of poison chemicals accidentally poured herself from the hose on the face, chest and arms. The mixture got into the respiratory system. The patient rinsed his mouth, washed his face and hands with water. An hour later there was a headache, dizziness, confusion, and excitement. The next day there was a fever, fever, shortness of breath, weakness, and severity in the right hypochondrium. He was hospitalized at the therapeutic department. At examination: the condition is heavy, inhibited, expressed acrocyanosis. Breathing vesicular, weakened in the lower parts, small and medium-bubbling wheezes, dulling of percussion sound, and the number of respiratory movements of 25 per minute. The heart tones are weakened, the rhythm is correct, the limits of relative dullness are widened to the left by 2 cm. The number of cardiac contractions is 120 per min., Blood pressure 110/60 mmHg. Abdomen is mild, moderately painful in the right hypochondrium, where the enlarged liver is palpated. The edge of the liver is painful, tight-elastic. Knee reflexes are high, asymmetric.

Formulate the diagnosis. Plan of treatment.

Task 23

Patient S., 41, complained of the appearance of weakness, irritability, bad mood, tearfulness, aching pains and paresthesia in the limbs. The patient worked in a weaving shop for the production of artificial silk for 20 years. When an objective examination of the pathology from the internal organs was not detected. Blood and urine tests without pathology. Neurological: emotional lability, bright red dermographism, uniform, symmetrical reduction of tendon reflexes, tremor of fingers of elongated hands, distal hyperalgesia of the upper and lower extremities.

Formulate the diagnosis. Plan of treatment.

Task 24

Employee with batteries 47 years old turned to the neurologist with complaints of headaches, general weakness, dizziness, sweet smack in the mouth. He was hospitalized in a neurological department. The examination revealed hyperhidrosis, lability of arterial pressure, decrease of plantar reflexes, symmetrical distal sensory impairment in polyneurotic type. The liver protrudes from the edge of the cranial arc of 3 cm, moderately painful when palpated. Blood testing for viral hepatitis markers has had a negative result.

Formulate the diagnosis. Plan of treatment.

Task 25

The patient T. is delivered by the brigade of ambulance to the reception department with complaints of severe abdominal pain, an increase in body temperature to 37.7 C, and the allocation of urine red. When collecting anamnesis it was found out that the patient for 7 years worked on the hydrometallurgical plant by the mechanic in contact with lead. According to the patient in the plant, malfunctions in the ventilation system often occurred. Patients consider themselves within 10 days when they began to disturb abdominal pains, gradually increasing and reaching the culmination on the day of treatment. Indicates no chair for 6 days. When examined, the patient is excited, presses his hands to the abdomen (in his words it reduces the pain), the stomach is retracted. With palpation, the stomach is tense, painful in all divisions, with palpation of pain is slightly less, there are no symptoms of peritoneal irritation. Formulate the diagnosis. What additional research should be done? Assign treatment.

Task 25

Estimated diagnosis - lead intoxication, 2nd degree: anemic syndrome, lead colic.

Survey: dynamics of general blood analysis, diastase of urine and blood amylase, general urinalysis, urine analysis on Nechiporenko, ultrasound examination of the abdominal cavity, FGS, biochemical blood test.

Antidotes when poisoned with lead - a series of complexing agents, mainly calcium salts EDTA, D-penicillamine (kuprimin) and dimeraprolin.

Task 26

The patient K., 46 years old, has been working for a period of 9 years as a refueler of planes using ethylene gasoline. Entered the clinic with complaints about headaches, increased fatigability, nervousness, hyperalsalivation. Sleep is superficial. At examination the general condition of the patient is satisfactory. The asymmetry of the facial inertia, the increase of tendon reflexes, and the weakness of the Romberg position are noted. Heart and lungs, organs of the abdominal cavity without pathological changes.

1. Formulate the diagnosis. Plan of treatment.

Task 27

Patient N., 33 years old, was admitted to the clinic with complaints of headache, rapid fatigability, poor sleep, increased sweating, metal taste in the mouth, memory loss. From the anamnesis it is established that the patient for 6 years works in a factory producing mercury-quartz lamps and has contact with metallic mercury. Objectively: the general condition of the patient is satisfactory, tremor is marked, fingers of elongated hands, persistent red dermographism, trophic disorders found - fragility of nails, hair loss. At the examination of the oral cavity bleeding gums, moderate gingivitis are noted. Bodies of the chest and abdominal cavity without pathological changes. In the study of blood - moderate anemia.

1. Formulate the diagnosis. Plan of treatment.

Task 28

Patient L., 38 years old, working on the petroleum refinery for the production of benzene, seniority - 17 years. He entered the hematologic department with complaints of malaise, nosebleeds and hemorrhages on the skin. The general condition of the patient of moderate severity, the skin and mucous membranes are pale. Pulse 88 wat. per min The heart is enlarged to the left, systolic murmur on the apex, vesicular breathing in the lungs. Belly soft, painless, liver and spleen are not enlarged. Blood test; $2.3 \times 10^{12} / l$, color. index 1,0, hemoglobin 78 g / l,

reticulocytes 0,9%, platelets $9,2 \times 10^9 / l$, leuk. $2.9 \times 10^9 / l$, ESR -14 mm / h. Formulate the diagnosis. Assign an examination and treatment.

Etalon response:

Chronic intoxication with benzene, average degree of heaviness. Leading syndrome - hematologic - anemia, leukopenia, thrombocytopenia.

General clinical examinations, ultrasound examination,.

Detoxification Therapy - reopolyglukine, rheosorbilact, glucose, blood transfusions, platelet.

Task 29

A typographer, 38 years old, complains about sharp cramping abdominal pain, constipation for more than 5 days. On the gums - a lilac fringe. Tachycardia, the tones are sonorous. Pulse - 100 watts. per min Blood Pressure - 160/90 mm Hg The stomach is intact, painful around the navel, with deep palpation pain decreases. There were no 4 days emptying. Urine analysis: Δ -aminolevulinic acid - 30 mg / g. Formulate the diagnosis. Additional surveys. Appoint treatment.

Etalon response:

Saturnism, pronounced form, lead colic

Laboratory general clinical research.

Complexes, thetacine-calcium + pentacin, kauprenil, liver diathermy, electrophoresis of magnesium sulfate to the liver, 5% glucose solution, sedatives.

Task 30

A patient, 41, turned to the clinic with complaints of general weakness, headache, ear cramps, hearing loss, dizziness, abdominal pain attacks. When viewed - horizontal nystagmus, bradycardia, stomach enlarged, painful palpation. Pupils are dilated, flaccidly reacting to light. Positive Menier's Symptom. From the anamnesis it is known that he works as a diver at a rescue station. Formulate the diagnosis. Appoint additional examinations and treatments.

Etalon response:

Caesarean disease, medium-tidal course.

Detection of gas bubbles in the cavity of joints, synovial sinuses, labyrinth with X-ray examination, positive results of recompression.

Recombination, inhalation with oxygen.

Task 31

Man K., 55 years old, employee of the foundry shop of the metallurgical plant. Complains with pulsating headache, dizziness, apathy, vomiting and nausea, short-term loss of consciousness. Objectively: tachycardia 110-130 u / s, tachypnoea, hyperemia of the skin, body temperature 40-41, hyperhidrosis. Formulate the diagnosis. Appoint additional examination and treatment.

Etalon response:

Hyperthermic form of overheating, of moderate severity.

ECG, laboratory general clinical tests, consultations of the neurologist, send to the occupational pathologist.

Physiotherapy. Use of cool soda water. Temporarily transferred to working conditions are not related to the effect of heating microclimate, cooling, heavy physical activity for 1-2 months, followed by the passage of thermal adaptation before the restoration of work in a heated microclimate.