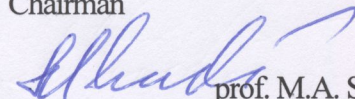


The Ministry of Health of Ukraine
National Pirogov Memorial Medical University, Vinnytsya
Specialty – 222 “Medicine”

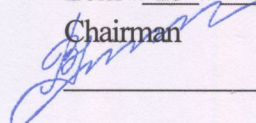
«Considered»

on the methodical council of
therapeutic disciplines
Protocol № 5
from « 13 » 03 2024
Chairman


prof. M.A. Stanislavchuk

«Approved»

by the Academic Council of the
National Pirogov Memorial Medical
University, Vinnytsya
Protocol № 9
from « 25 » 04 2024
Chairman


prof. V.V. Petrushenko

Instructions for the student to the station № 2
"Standardized patient in the clinic of internal medicine, part 2"

Carrying out of the State certification of applicants of higher education of preparation specialists of the second (master's) level of higher education in the field of knowledge 22 "Health" in the specialty 222 "Medicine" will take place under martial law in one-day format according to the provisions on the procedure for conducting OSP(C)E in VNMU named after M.I. Pirogov approved at the meeting of the Academic Council on 30.12.2021, protocol №8.

The procedure for conducting OSP(C)E is regulated by the Regulation on the introduction of elements distance learning at VNMU named after M.I. Pirogov and will take place on the Microsoft Teams or Google Meet platform.

At the station, the student must greet and introduce himself, present a student identification card and a route sheet to the teacher. A student receives a clinical task, which involves communication with the patient (tutor), who needs to interview complaints, their details and anamnestic data.

During working with a patient (tutor):

The student must greet and introduce himself and ask the patient how he can address him. After receiving information about the patient's name, ask the permission to interview him.

NB! Pay attention!

When dealing with a patient, student's communicability is assessed separately

Interview the patient's complaints, detail them, and analyze the anamnestic data.

During working with a patient, the ability to elaborate complaints and anamnestic data are assessed.

Time limit for collecting complaints and anamnesis - 2 minutes.

The patient reports immediately all complaints that concern him, which automatically indicates no other complaints.

The patient may say that he does not have information about questions, which the student is too inquisitive interrogated, thus making it clear that it is necessary to proceed to the next step in the task.

The student receives data from the objective examination of the patient in a paper version (clinical task) in addition to the task.

Time limit for assessment of clinical task data - 1 minutes.

During working with the clinical task:

1 - to analyze the data of the objective patient examination.

2 - to interpret the data of laboratory and instrumental data of the patient. The student must name the available deviations from normal values and give a conclusion.

Time limit for the interpretation of laboratory-instrumental data - 2 minutes.

3 - to make a clinical diagnosis.

Time limit for clinical diagnosis - 2 minutes.

4 - determine the tactics of patient management. The student must determine the place of treatment - outpatient or hospitalization of the patient, indicate department. Appoint a treatment for the patient, referring to the group of drugs and the representative indicated in the task.

To prescribe treatment for the patient, naming the groups of drugs and the representative of the group. The treatment must include non-pharmacological (lifestyle modification) and pharmacological treatment (name the groups of drugs and the name of the representative of the group) and prevention).

Time limit for treatment tactics – 2-3 minutes

After completion of the task or the end of the time spent at the station, return the task to the teacher, pick up your route sheet with a note about being at the station, and leave the station.

Time limit for of passing the station - 8-10 minutes.

It is forbidden to use a mobile phone and other electronic gadgets, out of answer during the exam, transfer, copy, screen and distribute any information that is relevant to the exam and is not publicly available.

Requirements for passing the station remotely:

- To use a computer or laptop during the answer;
- the answer is accepted only if a camera is on, where the student who passes the exam is clearly visible, and if a microphone is on with a clear sound;
- video is recorded while working at the station.

List of situations from the cycles of infectious diseases, tuberculosis, allergology, occupational diseases, military therapy:

- Salmonellosis,
- Shigellosis,
- Cholera,
- Typhoid fever,
- Botulism food,
- Influenza,
- Measles
- Diphtheria of the tonsils,
- Infectious mononucleosis,
- Serous meningitis,
- Meningococcal meningitis,
- Meningococemia,
- Viral hepatitis A, B,
- Chronic viral hepatitis C,
- Leptospirosis,
- HIV infection,
- Lyme borreliosis,
- Malaria,
- Shingles,
- Tuberculosis: focal, infiltrative, disseminated, miliary, fibro-cavernous
- Tuberculosis of intrathoracic lymph nodes,
- Multidrug-resistant tuberculosis,
- Primary tuberculosis complex

- Tuberculous pleurisy,
- Valve spontaneous pneumothorax,
- Hereditary angioedema,
- Drug anaphylactic shock,
- Allergic rhinitis,
- Bronchial asthma,
- Quincke's edema,
- Pneumoconiosis,
- Lead intoxication,
- Chronic benzene intoxication,
- Chronic intoxication with organochlorine pesticides,
- Vibration disease
- poisoning by combat poisons of nerve-paralytic action
- acute radiation sickness
- poisoning with military poisons by substances of suffocating action
- general hypothermia
- prolonged squeezing syndrome

List of laboratory research methods: general analysis of blood, bilirubin and its fractions, blood albumin, transaminases, alkaline phosphatase, GGTP, markers for viral hepatitis, cholesterol, coagulogram, potassium, sodium, phosphorus, chlorine, calcium, ionized calcium, immunoglobulin, gluco to viruses, analysis of subpopulations of lymphocytes, analysis of cerebrospinal and pleural fluids; coprogram, total IgE, C1-esterase inhibitor, skin testing for household allergens, Mantoux test, serum iron, urine analysis for delta-aminolevulinic acid and coproporphyrin.

List of instrumental research methods: ECG, Chest X-ray, spirometry, liver elastography.

List of situational tasks

Situation task

Complaints and medical history will be presented.

Objective status: Body temperature 38,8°C. The tongue is dry, covered with white layers. The abdomen is soft, painful during palpation in the right ilium and around the navel. No symptoms of the peritoneum irritation.

Done: General blood test, Coprogram

Task:

1. Diagnose.
2. Interpret CBC and coprogram.
3. Assign specific diagnostic methods.
4. Assign etiologic therapy, mentioning the group, representative and route of administration.

Situation task

Complaints and medical history will be presented.

Objective status: tongue is wet with white patches. The abdomen swollen, painful bowel movements, especially in the left iliac region. The sigmoid is painful, tense in palpation. Symptoms of abdomen irritation are negative.

Done: Full blood count, rectoromanoscopy.

Task:

1. Diagnose.
2. Interpret CBC and rectoromanoscopy
3. Assign specific diagnostic methods.
4. Assign etiologic therapy, name the group, the representative one and the way of usage.

Situation task

Complaints and medical history will be presented.

Objectively: skin covers and visible mucous membranes - dry, pale, clean. On the face - acrocyanosis. Skin turgor is reduced. Body temperature 35,6°C. Above the lungs - vesicular breathing. Breathing frequency - 25/min. Pulse - 102/min. AP 80/40 mm Hg. The tones of the heart are muffled, rhythmic. The tongue is dry, lined with a white bloom. The stomach with surface palpation is soft, painless, with deep sliding palpation - a sense of fluid transfusion. Liver and spleen within normal limits. The stool - up to 15 times a day, watery with white flakes, odorless. Diuresis is decreased. Loss of fluid is 7% of body weight.

Done: Complete blood count, electrolyte composition of blood plasma

Task:

1. To establish a diagnosis.
2. Interpret additional non-specific methods of diagnosis.
3. Appoint a specific diagnosis to confirm the diagnosis.
4. Principles of pathogenetic and etiotropic therapy with the definition of representatives of the drugs group and the route of administration.

Situation task

Complaints and medical history will be presented.

Objective status: On the abdomen - single elements of roseola rash. Tongue coated with brown bloom, thickened with imprints of teeth on the edge. Tip of the tongue and side surfaces are free of plaque. During abdominal palpation: abdomen is soft, slightly sensitive around the navel, increased in volume because of flatulence. The lower edge of the liver on l. medioclavicularis dextra + 3,5 – 4 cm, palpable liver edge elastic, smooth, sharp, not painful. During percussion: blunting sound in the right iliac region. Spleen + 1cm. No feces for 3 days already.

Done: Biochemical laboratory tests, General blood test

Task:

1. Establish a diagnosis.
2. Interpret the shown diagnostic methods.
3. Prescribe a specific diagnostic method to confirm the main diagnosis.
4. Prescribe etiotropic treatment indicating representatives of the drugs group and route of administration.

Situation task

Complaints and medical history will be presented.

Objectively: Respiration rate 19/min. Vomiting reflex is weakened. Mucous membranes of oropharynx are dry. Constipation for 2 days.

Done: CBC, Ophthalmoscopy

Task:

1. Establish a diagnosis.
2. Interpret additional non-specific diagnostic methods and instrumental examination.
3. Assign a specific diagnosis to confirm the diagnosis.
4. Prescribe etiotropic treatment indicating the group of drugs and route of administration.

Situation task

Complaints and medical history will be presented.

Objectively: body temperature 39,7°C. The face is hyperemic, slightly swollen, vessels of sclera are injected, pharynx is hyperemic. RF 18/min, SpO₂ 98%. Respiration above lower lobes of lungs is weakened. Pulse 100/min. BP 100/70 mm Hg. Meningeal symptoms are negative.

Done: General blood test, CT scan of lungs

Task:

1. Make the diagnosis.

2. Interpret nonspecific diagnostic methods.
3. Specific diagnostic methods.
4. Assign etiotropic treatment with the name of the group of drugs
5. and the route of administration.

Situation task

Complaints and medical history will be presented.

Objective status: The face is puffy. Redness of eyes. Throat hyperemic, on the mucous membrane of the cheeks in front of the canines - whitish small elements of the rash on a hyperemic background. The enlarged, not painful apical lymph nodes palpate. On the skin of the head, face, neck and upper chest, a maculopapular rash is visualized, which occasionally fuses. Vesicular breathing with a hard hue, single dry wheezing.

Done: General blood test, X-ray examination of the thoracic cavity.

Task:

1. Make a diagnosis.
2. Interpret additional non-specific diagnostic methods.
3. Assign a specific diagnosis to confirm the diagnosis.
4. Principles of therapy.

Situation task

Complaints and medical history will be presented.

Objective: body temperature 38,0° C. There is pallor of the skin, slight cyanosis of the lips and mucous membranes. Submandibular lymph nodes are enlarged to 2 cm. The tonsils are enlarged, covered with coarse films, grayish in color, which extend to the brackets and tongue. BH - 19 / min. Auscultatory vesicular respiration, no wheezing. Pulse frequent, soft, arrhythmic, tachycardia 102 beats per 1 min. The borders of the heart are dilated, a systolic murmur is heard above the apex, heart tones are muffled. Blood pressure 100/60 mm. rt. Art. The liver and spleen are not enlarged.

Done: ECG result, General blood test.

Task:

1. Establish a diagnosis.
2. Interpret additional survey methods.
3. Name the specific diagnostic methods.
4. Prescribe etiotropic therapy, naming the group, representative and route of administration.

Situation task

Complaints and medical history will be presented.

Objectively: body temperature is 39,0°C. The face is hyperemic, swollen, vessels of sclera are injected, tonsils are enlarged, with purulent coated, that are easily removed. Palpable enlarged anterior and posterior lymph nodes. Hepatosplenomegaly.

Done: Complete blood count, specific laboratory tests

Task:

1. Make the diagnosis.
2. Interpret specific and nonspecific diagnostic methods.
3. Specific diagnostic methods.
4. Etiotropic therapy, names the group drugs and the representative drug way of usage.

Situation task

Complaints and medical history will be presented.

Status praesens objectivus: body temperature 38°C, stiff neck muscles, Kernig's symptom (+++), Brudzinsky's symptoms (+++), no brain function disorders, pale hot skin, AP - 100/70

mm Hg, pulse - 105 beats / min. There is a profuse vesicular rash on the mucous membrane of the lips.

Done: General blood test, spinal fluid analysis

Task:

1. Establish a diagnosis.
2. Interpret the shown diagnostic methods.
3. Prescribe a specific diagnostic method to confirm the main diagnosis.
4. Prescribe etiotropic treatment and name of the group of medicines, route of administration and duration of treatment.

Situation task

Complaints and medical history will be presented.

Status praesens objectivus: a patient is conscious, but somewhat slowed down. Body temperature - 39,9°C. The skin is pale. Throat hyperemic. There are no rashes on the skin or mucous membranes. Meningeal symptoms are stiff neck muscles, Kernig's symptom (++++), Brudzinsky's symptoms (++++), no brain function disorders.

Done: General blood test, spinal fluid analysis

Task:

1. Establish a diagnosis.
2. Interpret the given diagnostic methods.
3. Prescribe a specific diagnostic method to confirm the main diagnosis.
4. Prescribe etiotropic treatment and name of the group of medicines, route of administration and duration of treatment.

Situation task

Complaints and medical history will be presented.

Objectively: the patient is conscious, somewhat inhibited. The body temperature is 39,8°C. The throat is hyperemic. On the thighs and buttocks the rash is hemorrhagic, irregular (star-like) in shape. Meningeal symptoms are negative.

Done: General blood test, Coagulogram

Task:

1. Make the diagnosis.
2. Interpret the additional non-specific diagnostic methods.
3. Specific diagnostic methods.
4. Etiotropic therapy, names the drugs and the representative drug way of usage.

Situation task

Complaints and medical history will be presented.

Status praesens objectivus: body temperature 36,5°C, skin and visible mucous membranes are of yellow color. The lower edge of the liver by L. medioclavicularis dextra + 4.5-5cm, painful in palpation. Urine is dark brown. Feces - light yellow color.

Hepatitis B and C markers are negative.

Done: general analysis of blood, bilirubin and its fractions, transaminases.

Task:

1. Make the diagnosis.
2. Interpret additional non-specific diagnostic methods.
3. Specific diagnostic methods.
4. Treatment.

Situation task

Complaints and medical history will be presented.

Objectively: satisfactory condition of the patient. Pathological symptoms from the cardiovascular and respiratory systems are absent. Abdominal palpation is soft, painless. The liver is not enlarged.

Done: ELISA for viral hepatitis, bilirubin and its fractions, blood albumin, transaminases, alkaline phosphatase, liver elastometry.

Task:

1. Make the diagnosis.
2. Interpret specific and nonspecific diagnostic methods.
3. Assign additional examinations.
4. Assign etiotropic therapy, name the drugs. Prevention of the disease for the sexual partner.

Situation task

Complaints and medical history will be presented.

Objectively: without significant deviations from the norm.

CBC, urine, abdominal ultrasound - without significant deviations from the norm. Markers of hepatitis A and B are negative.

Done: Biochemical tests, liver elastometry.

Task:

1. Make the diagnosis.
2. Interpret nonspecific diagnostic methods.
3. Specific diagnostic methods.
4. Etiotropic therapy: name the group of drugs and the representative drug, duration of treatment.

Situation task

Complaints and medical history will be presented.

Objectively: Body temperature is 38,2 °C. Face is hyperemic, sclerae are injected. Skin and visible mucous membranes are icteric. Palpation is painful in all groups of leg muscles. Hepatomegaly. Daily amount of consumed liquid – 1,5 liters. Daily amount of excreted urine - 400 ml.

Done: General blood test, Biochemical laboratory tests.

Task:

1. Make the diagnosis.
2. Interpret additional nonspecific diagnostic methods.
3. Specific diagnostic methods.
4. Etiotropic therapy, names the group of drugs and duration of therapy.

Situation task

Complaints and medical history will be presented.

Objectively: The patient's condition is severe. T 38,3°C. At low exercise there are dyspnea and non-productive cough. Skin and mucous membranes are pale, slight cyanosis of the lips. RR 22 / min. Percussion of lung – dull sound. Auscultation of lungs - diffuse dry rales. SpO2 82% on room air.

Done: Complete blood count, Chest X-ray

Task:

1. Make the diagnosis.
2. Interpret specific and nonspecific diagnostic methods
3. Specific diagnostic methods.
4. Assign etiotropic treatment with the name of the group of drugs and the route of administration.

Situation task

Complaints and medical history will be presented.

Objectively: body temperature – 37,9°C. Pulse 112 beats per minute. Respiratory rate 23 per minute during rest. On a interscapular area of the skin warm to a touch bright ring like erythema with clear edges and zone of enlightenment in the center with size 15 x 10 cm was found. Auscultation of heart: arrhythmic extrasystole, weakened first tone at the top of the heart.

Done: Full blood count, ECG

Task:

1. Establish a diagnosis.
2. Interpret the shown nonspecific diagnostic methods.
3. Prescribe a specific diagnostic methods to confirm the diagnosis.
4. Etiotropic therapy, names the group of drugs and duration of therapy.

Situation task

Complaints and medical history will be presented.

Objectively: The skin of the patient is dry, hot to touch, icteric. Sclera is icteric. Pulse - 100/min. The lower edge of the liver by L. medioclavicularis dextra + 2,5 cm. Palpable spleen.

Done: General blood test, Biochemical laboratory tests.

Task:

1. Make the diagnosis.
2. Interpret nonspecific diagnostic methods.
3. Assign specific diagnostic methods.
4. Assign etiotropic therapy, mentioning the drug and duration of the therapy. Chemoprophylaxis and scheme of its purpose.

Situation task

Complaints and medical history will be presented.

Objectively: body temperature 38,6°C, on the skin of the chest along the VI-VII intercostal nerves on the left there is a rash: spots, papules, and numerous vesicles with transparent contents, which are grouped in places. Other areas of the skin are clean and of normal color.

Done: CBC, creatinine, BUN

Task:

1. Establish a diagnosis.
2. Interpret additional non-specific diagnostic methods.
3. Assign specific diagnostics to confirm the diagnosis.
4. Prescribe etiotropic treatment indicating the representatives of the group of drugs and the route of administration.

Situation task

Complaints and medical history will be presented.

Objectively: Fair patient condition. General inspection - normal skin and mucous membranes. No changes on auscultation and percussion.

Done: Chest X-ray, Tuberculin skin test

Tasks

Question 1. What is the most likely diagnosis?

Question 2. How would you interpret CXR findings and what would you expect the CXR results to reveal?

Question 3. What is your investigation plan?

Question 4. How you may interpret TST result?

Situation task

Complaints and medical history will be presented.

Physical Exam: Serious patient's condition. Pale skin with cutaneous vasodilation on upper spinal zone (Frank's sign). On auscultation – diminished breath sounds over upper lobe of the right lung

Done: Chest X-ray, AFB smear microscopy (Ziehl-Neelsen stain), Complete blood count.

Tasks

Question 1. What is the most likely preliminary diagnosis?

Question 2. How would you interpret CXR findings?

Question 3. How would you interpret CBC?

Question 4. What else might this illness be?

Situation task

Complaints and medical history will be presented.

Physical Exam: Serious patient's condition. There was a pale skin on visual inspection.

28 breaths per minute.

Done: Chest X-ray, Sputum AFB smear microscopy (Ziehl-Neelsen stain), Complete blood count.

Tasks

Question 1. What is the most likely preliminary diagnosis? Please define the case in accordance with current classification.

Question 2. How would you interpret CXR findings?

Question 3. What else might this illness be?

Question 4. How are you going to treat this patient?

Situation task

Complaints and medical history will be presented.

Physical Exam: Serious patient's condition, malnourished. There were pale skin on visual inspection, compression syndrome and hypertrichosis on the dorsal apices of the thorax.

Done: Chest X-ray, Complete blood count

Tasks

Question 1. What is the most likely preliminary diagnosis?

Question 2. What is suggested investigation plan?

Question 3. How would you interpret CXR findings?

Question 4. What would you interpret CBC?

Question 5. How long are you going to treat this patient?

Situation task

Complaints and medical history will be presented.

Physical Exam: Serious patient's condition, asthenic constitution, malnourished. There were pale skin and mucous membranes on visual inspection. He had 32 breaths per minute. Asymmetry of the thorax with clinical manifesting of tracheal deviation and mediastinal shift. Blood pressure – 110/60 mm Hg. On auscultation – bronchial breath sound, moist rales.

Done: Chest X-ray, Sputum (acid fast stain) smear microscopy.

Tasks

Question 1. What is the most likely preliminary diagnosis?

Question 2. What is Rubinstein's sign?

Question 3. What complications has been developed in TB patient?

Question 4. What would you interpret CXR?

Situation task

Complaints and medical history will be presented.

Physical Exam: Patient looks pale and asthenic. Cutaneous vasodilation on upper spinal zone (Frank's sign) and no post-BCG scar.

On percussion- dull sound over upper lobe of the left lung; auscultation over this area - diminished breathing.

Done: Chest X-ray, Tuberculin skin test, Sputum AFB smear microscopy.

Tasks

- Question 1. What is the most likely preliminary diagnosis?
- Question 2. What stage of the disease was detected on the chest radiography?
- Question 3. How would you interpret TST?
- Question 4. How this case has to be defined?
- Question 5. What are the most common complications of suggested illness?

Situation task

Complaints and medical history will be presented.

Physical Exam: General condition – satisfactory. Vitals: blood pressure – 120/80 mm Hg Breath rate – 25 per min, Pulse – 90 per min. He had poor chest expansion on the right side. Palpation of abdomen was normal.

Done: Complete blood count, Chest radiography, Chest ultrasound investigation, Diagnostic thoracentesis, Tuberculin skin test

Tasks

- Question 1. What diagnosis do you suspect?
- Question 2. What is the next step in investigation?
- Question 3. How would you interpret TST?
- Question 4. What is the origin of pleural fluid?
- Question 5. How are you going to treat this patient?

Situation task

Complaints and medical history will be presented.

Physical Exam: General condition – severe. Skin and visible mucous membranes are pale. Patient is asthenic. On lung auscultation – diminished vesicular sound. Abdominal palpation revealed hepatosplenomegaly.

Done: Chest radiography, AFB smear microscopy, Tuberculin skin test

Tasks

- Question 1. What diagnosis do you suspect?
- Question 2. What else might this illness be?
- Question 3. How TST result should be interpreted?
- Question 4. How are you going to treat this patient?

Situation task

Complaints and medical history will be presented.

Physical Exam: Skin and visible mucous membranes are pale. Patient is asthenic. On lung auscultation – diminished vesicular sound and moist rales over upper right lobe.

Done: Complete blood count, Chest radiography.

Tasks

- Question 1. What diagnosis do you suspect?
- Question 2. How would you interpret CBC?
- Question 3. How CXR findings should be interpreted?
- Question 4. What complication has been developed in this patient?
- Question 5. What is your suggested investigation plan?

Situation task

Complaints and medical history will be presented.

Physical Exam: Sever general condition. Skin and visible mucous membranes are cyanotic. Vitals: Pulse – 110 bpm, Blood pressure – 95/50 mm Hg.

On lung auscultation – diminished breath sound over left lung combined with tympanic resonance on percussion.

Done: Chest radiography

Tasks

Question 1. What is differential diagnosis list?

Question 2. What clinical and instrumental data were the most helpful to suspect this condition?

Question 3. What is your investigation plan to clarify the diagnosis?

Question 4. How are you going to treat this patient?

Situation task

Complaints and medical history will be presented.

Objectively : Swelling is pale, diffuse, dense on palpation, unilateral

Done: Complete blood count, Total IgE, C1-esterase inhibitor

Task:

1. Provide an interpretation of the clinical signs of edema.
2. Provide an interpretation of laboratory tests.
3. Establish a preliminary diagnosis.
4. Provide emergency care.
5. Indicate options for immunoprophylaxis of angioedema.

Situation task

Complaints and medical history will be presented.

Objectively: General condition is severe, blood pressure = 70/50 mm Hg, heart rate = 110 beats / min, auscultation: dry, wheezing in the lungs.

Task:

1. Establish a preliminary diagnosis.
2. What is a specific marker of anaphylaxis?
3. What is a non-specific marker of anaphylaxis?
4. Identify step-by-step tactics for emergency care, name groups of drugs and their representatives.
5. Make a differential diagnosis

Situation task

Complaints and medical history will be presented.

Objectively: the general condition of the patient is moderate, ENT - status - the mucous membrane of the nasal sinuses is pale, swollen.

The patient underwent skin testing with household allergens, the results of which are presented in the figure (1 - solvent, 2- histamine, 3 - mite allergen *Dermatophagoides farinae*, 4 - dog hair allergen, 5 - mite allergen *Dermatophagoides pteronissynus*).

Task:

1. Interpret the result of the skin test.
2. Make a diagnosis.
3. Indicate the groups of drugs that can be used to treat this disease.
4. Give recommendations for the elimination of allergens from the patient's home.

Situation task

Complaints and medical history will be presented.

Objectively: the general condition of the patient is moderate, at auscultation of lungs scattered dry rales are listened.

Done: Spirometry

Task:

1. Give an interpretation of the result of the spirogram.

2. Make a diagnosis.
3. What additional screening methods need to be performed to confirm the diagnosis?
4. Indicate the groups of drugs that can be used to treat this disease.

Situation task

Complaints and medical history will be presented.

Objectively: the general condition of the patient of moderate severity, hoarseness of the voice, pink swelling of the face in the area of the lips, rash in the neck. The swelling is soft to the touch, not painful.

Task:

1. Make a diagnosis.
2. What type of immunopathological reactions is on the basis of this pathology?
3. Assign emergency care (name one drug from each group).

Situation task

Complaints and medical history will be presented.

Occupational history: Works at a porcelain factory for 37 years. In the study of working conditions an excess of MAC was established quartz dust. Concentration of free silicon dioxide in the production the environment is 18.0%.

Objectively: over the lungs mosaic percussion sound: areas of shortening and a tympanic shade of percussion sound. Against the background of hard breathing the areas of weakened breathing are heeded. Tones of the heart are pure, rhythmic. BP 120/70 mm hg. pulse 68 per minute/ satisfactory filling and pressure.

Done: Spirography, Chest X-ray

Task:

1. Formulate a preliminary diagnosis
2. Give an interpretation of the Spirography.
3. Give an interpretation of the Chest X-ray.
4. What expert decision should be taken regarding the working capacity of this worker?

Situation task

Complaints and medical history will be presented.

Occupational history: He is a battery factory worker involved in the manufacturing of lead plates. In the study of his working conditions, an excess of the lead concentration in the working zone air was detected in 1,8 times.

Objectively: the skin is pale, clean. Heart rate 60 per min., BP 140/90 mm Hg. Heart tones are weakened, rhythmic at all points of auscultation, no noise. In the lungs - vesicular breathing. Tongue is moist, along the edge of the gums, mostly near the frontal teeth, a strip of lilac-like color is determined. The abdomen is retracted, painful around the navel, with deep palpation the pain decreases. The liver is not palpated.

Neuropathologist has established astheno-vegetative syndrome, vegetative-sensory polyneuropathy of the lower extremities.

Done: Complete Blood Count, Urine test, Electrocardiogram

Task:

1. Formulate a preliminary diagnosis.
2. Give an interpretation of the blood and urine test.
3. Give an interpretation of the Electrocardiogram.
4. Determine the place of treatment and prescribe the main treatment, referring to the antidotes, the route of administration and the duration of the antidote therapy.

Situation task

Complaints and medical history will be presented.

Occupational history: He works a polisher with using a benzene solution, has a 10-year experience of the work.

Objectively: pallor of the skin and mucous membranes, bright red dermographism, hyperhidrosis of the palms, decreased body temperature. Lymphnodes are not enlarged. In Romberg's post of - tremor of fingers. Pulse 76 per minute, rhythmic. BP 110/60 mm Hg. The lability of the pulse and blood pressure is determined. The abdomen is soft, the liver is palpated along the costal edge, the spleen is not palpated.

Done: Complete Blood Count, Electrocardiogram

Task:

1. Formulate a preliminary diagnosis.
2. Give an interpretation of the blood test.
3. Give an interpretation of the Electrocardiogram.
4. Assign the treatment, calling the group and the drug.

Situation task

Complaints and medical history will be presented.

Occupational history: she has been working on a pesticide warehouse during the last 2 years. Functional duties include packaging and dispensing of pesticides for agriculture.

Objectively: the skin is clean, acrocyanosis. Pulse - 42 per minute, rhythmic. BP 100/50 mm Hg. The left cardiac border is displaced by 1 cm to the left of the left mid-clavicular line. The first tone of the heart is weakened above the top. Above the lungs vesicular breathing is heard, above the posterior-lateral parts - non-sound fine moist rales. The liver protrudes 2 cm from the edge of the costal arch, its edge is soft, moderately painful. Foot swelling and doughy shin are observed.

Done: General blood test, ECG

Task:

1. Formulate a preliminary diagnosis.
2. Give an interpretation of the blood test. Give an interpretation of the Electrocardiogram.
3. Identify the main approaches to treatment.
4. Conduct an examination of the workability for this patient.

Situation task

Complaints and medical history will be presented.

Occupational history: the patient works as a tractor-driver of crawler transport for 12 years. During the study of working conditions, a combination of these types of vibration was found: the general low-frequency vibration caused by the running system of the car and the shake from road irregularities; - general medium and high-frequency vibration from engine run; - local medium and high-frequency vibration, transmitted from the control and switching levers.

Objectively: the skin of the limbs is cold to the touch, the skin of the hands is cyanotic, while pressing on it there are white spots, palms are hyperhidrosis. The temperature of the skin of hands is 32 °C. During palpation of the leg muscles pain is noted. Pain, tactile and temperature sensitivity are lowered. Pulse - 84 per minute, rhythmic. BP - 150/100 mm Hg. The heart tones are weakened.

Consultation of a neurologist: a syndrome of vegetative-sensory polyneuropathy of extremities.

Done: ECG, Capillaroscopy of the thumb's nail fold, X-ray of the wrist joints and ankle-joint

Task:

1. Formulate a preliminary diagnosis.
2. What diagnostic method is the most informative in this case? Give an interpretation of the results of capillaroscopy.
3. Give an interpretation of the results of radiography of the joints. Indicate further changes in the radiography of the joints as the disease progresses.
4. What expert decision should be made regarding this patient?

Situation task

Complaints and medical history will be presented.

Objectively: General condition of moderate severity.

Consciousness is clear. Patient has a forced sitting position with fixation of the shoulders. The skin is moist, the pupils are narrow and do not react to light. There is drooling, fibrillar contractions of separate muscle groups of the upper and lower limbs.

Pulse 46 per minute, rhythmic, blood pressure 90/60 mm Hg. Heart sounds are rhythmic, weakened. The respiratory rate is 28 per minute. The lung's auscultation - breathing is hard, with prolonged exhalation, many dry whistling and moist rales of various caliber. The abdomen is soft, moderately painful on palpation of all parts.

Task:

1. Interpret the blood test.
2. Evaluate the ECG.
3. Formulate the diagnosis.
4. What antidote from the individual's first-aid kit should have been administered to the victim at the previous stage of medical evacuation?
5. Define patient management tactics and prescribe basic treatment, naming the main groups of pharmaceuticals and its representatives.

Situation task

Complaints and medical history will be presented.

Objectively: The condition is of moderate severity, the skin of the face is slight hyperemic. Pulse 92 per minute, rhythmic, blood pressure 110/70 mm Hg. SaO₂ - 94%. Heart sounds are weakened. Respiratory rate - 24 per minute. Over the lungs - dullness of the percussion sound on the right side below the angle of the scapula, in this place during auscultation - bronchial breathing. The abdomen is soft and painless on palpation.

Task:

1. Interpret Complete Blood Count.
2. Interpret the Chest X-ray.
3. Formulate the diagnosis, indicating the main disease and its complications.
4. Determine patient management tactics and prescribe treatment, by naming the drug group and its representative according to the existing algorithm.

Situation task

Complaints and medical history will be presented.

Objectively: The patient is agitated, anxious. His skin is moist, bluish, cough with foamy pink sputum. Pulse 110 per minute, rhythmic, blood pressure 100/60 mm Hg. Heart sounds are weakened. Respiratory rate - 32 /minute, breathing is weakened, in the lower parts of both lungs - moist fine, soundless rales. Abdomen is soft, painless.

Task:

1. Interpret Complete Blood Count.
2. Interpret the Chest X-ray.
3. Formulate the diagnosis.
4. Determine patient management tactics and prescribe treatment, by naming the drug group and its representative according to the existing algorithm.

Situation task

Complaints and medical history will be presented.

Objectively: the patient is conscious, somewhat inhibited, cannot move himself. His lips are cyanotic, the skin is pale, cold to the touch, there is a symptom of "goosebumps" (cutis anserina), there is a decrease in muscle tone and suppression of tendon reflexes.

Respiratory rate - 16/min., BP - 100/60 mm Hg. Heart sounds are rhythmic, weakened. The pulse is 56 per minute, rhythmic, moderate size.

Body temperature is 34.20C. The temperature of the toes is 20C. The temperature in the rectum is above 30°C.

Task:

1. Evaluate urinalysis.
2. Formulate a preliminary diagnosis.
3. Prescribe treatment at the stage of first medical aid.
4. Make a medical evacuation route for this soldier.

Situation task

Complaints and medical history will be presented.

Objectively: the patient is conscious, somewhat retarded. The left leg is enlarged due to edema, there is no visible damage to soft tissues. The skin is pale, cold. The pulsation of the arterial vessels is sharply weakened on the limb. There are no active movements in the joints of the left leg, passive movements are limited due to severe pain. All types of sensitivity are impaired (hypesthesia). By the end of the day, blisters filled with transparent contents appeared on the skin of the injured limb. Respiratory rate 21 per minute. Blood pressure 90/50 mm Hg. Pulse 112 per minute, rhythmic, small filling. Body temperature is 38.2 0 C. Heart sounds are rhythmic, weakened.

Diuresis up to 30 ml per hour, dark chocolate-colored urine.

Task:

1. Interpret laboratory results.
2. Formulate a preliminary diagnosis.
3. Name the pathogenetic mechanisms of the development of the clinical syndrome.
4. Prescribe treatment at the stage of first medical aid. What method of removing myoglobin from the circulating blood is the most effective?

Literature

1. Internal medicine : Part 1 : textbook for English-speaking students of higher medical schools. Vinnytsya : Nova Knyha, 2019. – 408 p.
2. Internal medicine : Part 2 : textbook for English-speaking students of higher medical schools. Vinnytsya : Nova Knyha, 2019. – 360 p.
3. Harrison's Principles of Internal Medicine 19/E (Vol.1 & Vol.2) 19th Edition. 2017/ Dennis Kasper, Anthony Fauci, Stephen Hauser, Dan Longo, J. Larry Jameson, Joseph Loscalzo
4. Davidson's Principles and Practice of Medicine / 2018 / Pages 1440
5. Kumar and Clark's Clinical Medicine, 9th Edition//1456 pages / 2017
6. Oxford Textbook of Medicine (Warrell, Oxford Textbook of Medicine)(3-Volume Set) 5th Edition / by David A. Warrell), / 2017
7. Endocrinology. Textbook / Study Guide for the Practical Classes. Ed by Petro M. Bodnar: - Vinnitsya: Nova Knyha Publishers, 2008. – 496.
8. The Merck Manual of Diagnosis and Therapy, 18th edition /Editors: M.H. Beers, R.S. Porter, Th.V. Jones //Merck Sharp & Dohme Corp., 2006. –2991 p
9. www.ginasthma.org
10. http://www.ifp.kiev.ua/index_ukr.htm
11. <http://mtd.dec.gov.ua/index.php/uk/>
12. <https://www.nice.org.uk>
13. <http://www.oxfordmedicaleducation.com/>
14. <https://www.ueg.eu/guidelines/>
15. <http://ukrgastro.com.ua/>