The TASKS upon GASTROENTEROLOGY

Problem № 1.

Patient С, 36 years, the driver, complains of a sour eructation, a heartburn, sense of pression in the pancreatic areas in 20-30 minutes after meal, pains arised at reception of sharp, rough food is more often. Objectively the following findings could be detected: the tongue was wet, the root of the tongue was covered by the greyish-whitish substance. At a stomach palpation insignificant morbidity in epigastric area was detected.

1. What is your hypothesized diagnosis?

2. How pains in 20-30 minutes after meal were called?

3. What is the eructation?

4. What are the reasons of the heartburn occurrence?

5. For is the purpose while performing the superficial palpation of the abdomen?

The task № 2.

Patient Р, 43 years, the pharmacist, complains of starvation, late and night pains in pyloric and duodenal zone, a heartburn, an eructation. The appetite was normal or increased. Pains had begun since teen-age years, aggravations appeared in an autumn season, after intensive smoking, and irregular meals. The medical investigation revealed, that the patient is lean, the superficial and deep abdominal palpation provoked epigastric pain, and positive Mendel's symptom.

1. What is your hypothesized diagnosis?

2. What pains have the name “late pains”?

3. Describe the method of the deep palpation of a stomach?

4. How Mendel's symptom is defined?

5. What is the heartburn?

The task № 3.

The patient B., the turner, has sought medical attention with complaints to constant aching pains, with irradiation to the back, in the belt-like manner, especially at night, a weight loss. Similar symptoms disturbed the patient periodically within 2 years. The worsening of health state happened after the alcohol intake. After the radiology investigation small mobility of the stomach wall was revealed. The blood analysis: leycocytosis, shifting of the leycocitary formula to the left, increased of the Red Blood Cells Sedimentation Rate (RBCSR).

1. What is your hypothesized diagnosis?

2. What instrumental methods of investigation are essential for the confirmation of the diagnostics?

3. What laboratory methods of investigation are necessary for the diagnostics?

4. What changes in the general analysis of the excrements are characteristic for the actual pathology?

5. Does the troubles of the carbohydrate metabolism are characteristic for the actual pathology?

The task № 4.

The patient P., the electric engineer, has sought medical attention with complaints to a pain in the epigastric area in 40-50 minutes after food intake, a nausea, sometimes vomiting accompanying the pique of the pain, and after some time the patient feeled easier. Pain occurrence is preceded by a burning sensation in the epigastric and retrosternally. The patient considered that the pain appeared for the first time within 6 months during long business trip, but he did not consult a doctor. Afterwards the similar pain repeated after the use of bulky food and disappeared after milk. Last aggravation has begun 4 days ago, after heavy intellectual work and irregularity of eating. Objectively: the general patient`s status was satisfactory, the tongue was wet, is slightly covered by the whitish substance, carious teeth are available. The stomach was soft at a palpation, the epigastric zone was painful to the left from the median line. The moderate local muscular hypertension of the anterior abdominal wall and Mendel's positive symptom were detected. The liver was not increased. No eny evident pathology was not revealed.

1. What is your hypothesized diagnosis?

2. What type of eructation is characteristic in patients with the higher acidity of gastric juice?

3. Explain the phenomenon of peripheral vomiting

4. What is the Mendel`s symptom ?

5. Name the possible complications of the actual disease?

The task № 5.

Patient D., 75 years old, the pensioner. Consulted the general practitioner because of complaints to progressing loss of weight, total absence of appetite, disgust to meat and to fish dishes. The patient is sick for 6 months. Objectively: the patient is exhausted, the expressed morbidity at a stomach palpation in the epigastric zone.

1. What is your hypothesized diagnosis?

2. What is the "small signs» syndrome?

3. For what disease the given syndrome is characteristic?

4. What is the «gland of Virhov»?

5. When it is possible to detect the peritoneal friction sound?

The task № 6.

The patient T., 26 years old, the mechanic has arrived to a hospital with complaints to pains in the epigastrium in 2-3 hours after meal, the night pains which were reserved after the use of bicarbonate (soda), a painful heartburn, an eructation, a constipation. In the anamnesis there was the alcohol abuse, a lot of smoking, and bad diet commitment. At inspection morbidity in the epigastrium was revealed, mostly to the right side with minimal muscular tension in this zone.

1. What is your hypothesized diagnosis?

2. How pains appearing in 2-3 hours after meal are called?

3. Name the risk factors of the actual disease?

4. What is the heartburn?

5. Explain the mechanism of the pain of the actual disease?

The task №7.

The patient M. 53 years old, the engineer, has arrived in the clinic with complaints to the absence of appetite, epigastrium discomfort, the general weakness. The Patient was observed for many years because of the chronic gastritis. Last 6 months of a pain have taken the constant, persistent character with the weight loss of 6 kg. The patient was pale and lean, the abdominal wall in the epigastrium was painful during the medical palpation.

1. What is your hypothesized diagnosis?

2. What is the syndrome of "small signs»?

3. What the skin pallor is the sign of?

4. Where we could palpate the pylorus of the stomach?

5. What it is possible to reveal at the palpation of the pylorus in the actual case?

The task № 8.

The patient B., 40 years old, the turner, addressed to the doctor with complaints to constant pains, irradiating backwards, on belting epigastric pains, especially at night. Objectively: the pain at a palpation of the epigastric area.

1. What is your hypothesized diagnosis?

2. Name the dyspeptic troubles most typical for the actual pathology?

3. What changes of the feces could be observed at the actual pathology?

4. What are most probable reasons for the development of the actual pathology?

5. Name the possible complications of the actual pathology?

The task № 9.

The patient of 47 years old, from 20 years' age suffers a gastritis. 12 years ago the stomach ulcer for the first time was revealed. Aggravations of the ulcer were almost annual, usually during autumn and winter time, lasting not more than 3-4 weeks. The present aggravation has begun more than 4 months ago, and the patient stressed the constant character of pains, the strengthening of the pain after any meals, the irradiation of the pain backward. The appetite had sharply worsened, and the patient was afraid of eating because of pain aggravation after meals, disgust for meat food, has lost about 12 kg of weight. Within 3-4 weeks the eructation with the smell of "rotten eggs appeared. General inspection: very lean, with the greyish color of the skin. The tongue was covered with the white substance, there were signs of angular stomatitis. The epigastrium was painful with no muscular tension.

1. What is your hypothesized diagnosis?

2. What it is possible to reveal at inspection of lymph nodes at the actual pathology?

3. What is the eructation "rotten eggs" the marker of?

4. Why at the actual disease did the signs of angular stomatitis appear?

5. What is the Mendel's symptom?

The task № 10.

Patient А, 32 years old, has consulted by the doctor owing to complaints to a burning pain in the epigastrium, irradiating under the right shovel, appearing in 2 hours after meals, at night, relieving after soda reception, on a heartburn, a nausea, the general weakness, dizziness, palpitation, black feces.

Objectively: the patient`s status was not perfect: he was very lean with pale skin. No lung pathology was revealed. Heart rate was 112 per minute, weak filling, the arterial blood pressure was 100/65 mm Hg. The stomach was of normal configuration, at the palpation the epigastrium is painful, mostly to the right of the median line.

1. What is your hypothesized diagnosis?

2. How the pains arising in 2 hours after meal or at night are called?

3. Name the risk factors of the actual disease?

4. How is called black tarry [currant jelly] stool?

5. How is it possible to explain the presence of tarry stool, palpitation of the body and dizziness?

The task № 11.

Patient Н, of 56 years ago, 5 years ago began to mark the skin itching gradually becoming more severe. 2 years ago a jaundice appeared, gradually accruing, the discomfort in the right subcostal area. In the anamnesis there was the episode of viral hepatitis. Objectively: expressed jaundice, scratches on the skin, the xantelasmes, vascular "asterisks" on breasts, a liver is 3 cm lower the edge of the costal arch, very dense, the microtuberous surface, painless at the palpation. The increased spleen was palpated.

1. What is your hypothesized diagnosis?

2. Define (name) the basic syndromes of the actual disease?

3. What is the vascular asterisks?

4. What factors contribute for this disease?

5. What are the xantelasmes?

The task №12.

Patient L., 50 years old, complained of intensive constant pains in right hypochondrium, irradiating in the right shoulder, dryness and bitterness in the mouth, subfebrile temperature in the evenings. It was sick or about 5 years, he felt worse after fatty food. Objectively: the tongue was dry, covered by dense white substance. In the hypochondrium the palpation revealed the positive Ortner`s and Ker`s symptoms. Body temperature was 37,4°С.

1. What is your hypothesized diagnosis?

2. What is the Ortner`s symptom ?

3. Why pains at the actual disease have specific irradiation?

4. What are the factors contributing this disease?

5. In what cases the positive symptom of Kourvoizier is detected?

The task №13.

The patient of 45 years old, has called the doctor of "first aid" concerning an intensive pain at the beginning of all the epigastrium, and then localised in the right subcostal area. A pain was irradiating in the right shoulder and of the right shovel areas. Besides, the patient is disturbed by the nausea, recurring vomiting, the swelling of the stomach area. All the complaints appeared for the first time. The pain has arisen 2 hours after driving on the rough road. Under the recommendation of the neigbour, the patient has taken 2 tablets o the drotaverine. The intensity of the pain became a little decreased, but after a while recurred again. The color of the urine was dark. Objectively: a patient`s status was not very good. Body temperature was 36,8 °. The patient was obese, the skin was pale. The tongue was dryish, covered with white substance. In the epigastrium the palpation was painful, mostly in the field of right hypochondric zone and epigastrium areas. Other sites and systems were in normal status.

1. What is your hypothesized diagnosis?

2. What are the main risk factors of development of the actual pathology?

3. How could you explain the peculiarities of pain irradiation?

4. What changes of the feces would take place at the actual pathology?

5. Name the possible complications of the actual disease?

The task № 14.

The patient 3., 68 years old, arrived to the hospital with the complaints of the absence of appetite, a stomach swelling, the rapid weight loss, persistent pains in the field of the right subcostal area. He was examined by the doctor. The patient was exhausted, a liver was hilly at the palpation, a stone-like density. The sizes of a liver on Kurlow - 14-12-10 cm. In blood an anaemia and, leukocytosis were revealed.

1. What is your hypothesized diagnosis?

2. What is hypersplenism?

3. Do you know what kind of complications of the actual disease took place?

4. Name the normal sizes of the liver upon Kourlow?

5. What lines are used for defining the sizes of the liver upon Kourlow?

The task № 15.

The Patient G., 34 years old, for the the treatment had underwent blood transfusion. Afterwards the jaundice appeared and the skin became as yellow as lemon. The skin itching, skin hemorragies were not present. The liver at a palpation was painless, not increased. The spleen could be palpated from under the edge of the left costal arch.

1. What is your hypothesized diagnosis?

2. What kinds of jaundices to you know ?

3. What color of excrements is characteristic for each kind of jaundice?

4. How is it possible to distinguish a true jaundice from the false?

5. How the colors of feces and urine would be changed in case of the actual jaundice?

The task № 16.

The Patient М., 27 years old, the mechanic, was transported to the hospital with complaints to severe pains in the right hypochondrium zone, with irradiation lower the right scapula, into the right shoulder. The Patient was fallen ill sharply. The disease was associated with the rude breach in the diet (the day before he ate a lot of fatty meals, abused alcohol) and presented the nausea, vomiting by bile, increase of the body temperature up to 38,5°С. The palpation detected the muscular contraction in the epigastric area, on the right, in a gall bladder point, the positive phrenicus-symptom.

1. What is your hypothesized diagnosis?

2. Where is the gall bladder point situated?

3. What is the phrenicus-symptom?

4. Why at the actual disease a pain irradiated upwards and to the right?

5. When could the gallbladder be palpated?

The task № 17.

The Patient Ts., 42 years old, had arrived to the hospital with complaints to the stomach ballooning, the dyspnea, hypostases to the lower extremities and in the waist location. When the patient was young man of 20, he had had the viral hepatitis. Many times he was repeatedly treated in a hospital.

General inspection of the patient detected that he is exhausted, the skin is yellowish, hypostases on the bottom extremities and in the waist were present, the stomach was sharply increased in size, on lateral sites of the abdomen the expanded venous network was visible. At the palpation the presence of the free liquid in the abdominal cavity was defined. The liver was enlarged and the inferior edge was 3 cm lower the costal arch, the liver parenchyma was dense, its surface was “hilly”. Percussion in vertical position of the patient produced the dull sound below the navel.

1. What is your hypothesized diagnosis?

2. Name the basic syndromes?

3. How could you reveal the presence of the liquid in the abdominal cavity?

4. Name the normal sizes of the liver by Kurlow?

5. How is it possible to explain the severe exhaustion of the patient, the presence of hypostases in the standing position, in the waist zone?

The task № 18.

Patient К, 22 years old, had arrived to the hospital with complaints of a bad appetite, a nausea, troubles of the defecation, colouring of the skin and sclera in yellow. The jaundice developed slowly. The patient has simultaneously noticed that urine became dark, the feces decoloured. General inspection detected icteric skin status. At the palpation the liver was moderately enlarged, painful and dense.

1. What is your hypothesized diagnosis?

2. What is the most probable reason for the development of the actual disease?

3. Name the basic syndromes?

4. Name the normal sizes of the liver by Kurlow?

5. How it is possible to explain the emergence of the dyspepsy?

The task № 19.

Patient Т, 50 years old, the loader, has consulted the doctor because of the the constant pain in the right subcostal region, the feeling of abdominal ballooning, a nausea, vomiting with the scarlet blood, the severe weakness and fatigue.

The general inspection detected the icteric colour of the skin, the red colour of palms, vascular asterisks, expanded veins round a navel. At the palpation the liver was increased, dense, the spleen was enlarged also.

1. What is your hypothesized diagnosis?

2. How it is possible to explain the vomiting with the scarlet blood?

3. How vascular asterisks are called?

4. What is the cause provoking the enlargement of the subcutaneous veins round a navel?

5. What is the medical term for the palms coloured in red?

The task № 20.

Patient Yu., complains of dull aches in the right intercostal space, severe weakness, a nausea, vomiting, rise in body temperature up to 37.6°С. After the consulting with the doctor it was discovered that the patient often takes alcohol, he has had a drop too much of whisky three days ago. The general inspection detected

the icteric colourof the eyes, the increased, dense liver was palpated.

1. What is your hypothesized diagnosis?

2. What was the reason of development of the actual pathology?

3. Name the normal sizes of the liver by Kurlow?

4. Describe the normal liver state at the palpation.

5. What could be the issue of the over-mentioned disease?

ANSWERS for the TASKS upon GASTROENTEROLOGY

The task №1.

1. A gastritis with lower secretory function.

2. Early

3. Sonorous passage of air through the mouth accumulated in the stomach or the gullet, an eructation of food.

4. At heartburn the hypersensibility occurres in the mucous membrane of the gullet, dysfunction of the stomach cardia, the spasm of the pylorus and the troubles of propulsive duodenal and stomach functions. This provokes the gastro-oesophageal reflux causing a heartburn. More often the heartburn appears at increase of acidity of gastric juice.

5. At a superficial preliminary palpation it is possible to reveal the painful site and the tension of muscles of the abdominal wall, and also the divergence of the cross-striated muscles of a stomach and the presence of the white line hernia.

The task **№2.**

1. Stomach or duodenal ulcer.

2. In 1,5-2 hours after food intake.

3. The Sygm, caecum, ascending and descending colonic parts, detection of the lower border of the stomach, the large intestine, the pylorus, the big and small curvature of the stomach.

4.Pain at percussion of the anterior abdominal wall.

5. It is shown by the presence of the feeling of burning in epigastrium and retrosternally as a result of the reflux.

The task № 3.

1. An aggravation of the chronic pancreatitis.

2. Additional methods of investigation: ultrasonic investigation of the pancreas, bile ducts (for the screening-out goalbladder stones, a pancreas hypostasis.)

3. Definition of enzymes (amylase, lipase) in blood and urine, the coprology investigation.

4. Steatorrhoea or fatty stool, amylorrhea, creatorrhea.

5. Yes.

The task № 4.

1. Stomach ulcer in the aggravation phase.

2. Sour

3. Brings relief.

4. Occurrence of acute pains over the inflammation site at percussion with the fingertipf of 2-3-4 fingers of the abdominal wall

5. Bleeding, perforation, penetration, malignisation, stenosis

The task №5.

1. A stomach cancer.

2. Unmotivated weakness, work capacity decrease, depression, appetite decrease, gastric discomfort.

3. For a stomach cancer.

4. The increased lymph node in left supraclavicular area (metastasis).

5. At the peritonitis.

The task **№6.**

1. Stomach and duodenal ulcers.

2. Late.

3. The complicated heredity, improper diet, smoking, alcohol intake.

4. A burning sensation behind the chest wall, caused by the reflux of the acid liquid from the stomach into the gullet (a reflux - esophagitis).

5. A spasm of smooth muscles of the intestine, as a result of irritation of the mucous defect by the acid gastric contents.

The task **№7.**

1. A stomach cancer.

2. Unmotivated weakness, work capacity decrease, depression, appetite decrease, gastric discomfort.

3. About anaemia development.

4. On a bisector, the stomach formed by a white line and the horizontal line passing on the bottom border of a stomach.

5. The pylorus is dense, inactive, painful, with the hilly-like surface.

The task **№8.**

1. A pancreatitis.

2. A nausea, repeated vomiting, meteorisme, diarrheas.

3. Abundant, semi-liquid [doughy] feces

4.The gallbladder stones, abusing alcohol, alimentary factors.

5. Hypovolemic shock, a bleeding, a pancreatic abscess.

The task №9.

1. The cancer of a stomach accompanied by the stenosis of the pylorus.

2. Increase of the left supraclavicular lymphatic node («Virchov`s gland»).

3. The putrid smell of vomit mass is a result of severe retardation of the food evacuation out of the stomach and duodenum downwards and the “rotting” of the meals inside the upper part of the digestive tube.

4. The actual pathology leads to the troubles of absorption of the nutrients in the digestive tube and to the development of the iron deficiency anaemia.

5. The painful sensations at abrupt introducing and withdrawal of the finger on epigastric area.

The task №10.

1. The Stomach and duodenal ulcer bleeding.

2. Late, hungry, night.

3. The failed heredity, failure to comply with the proper diet, smoking, alcohol intake.

4. The melena.

5. The compensatory reaction for the acute hemorrage.

The task №11.

1. The liver cirrhosis.

2. The basic clinical syndromes: the portal hypertension, hepatic insufficiency, hypersplenism.

3. Slightly towering over the skin angiomes with radiating small vascular branches.

4.The viral hepatitis, cholestasis, toxic and allergic factor, alcohol.

5. The yellow round symmetrical plaques of cholesterol on the auricles, an oral cavity.

The task №12.

1. A chronic cholecystitis in the phase of aggravation.

2. The pain in the right hypocondrium at percussion (tapotement) on the edge of the costal arches.

3. Right n. phrenicus innervating the liver capsule and extrahepatic biliry ways, originates in the same segments of the spinal cord, as the nerves, innervating the neck, a shoulder. The irradiation of the pain is caused by the possibility of transition of the irritation through these nerves.

4. Contributing factors: the hepatitis, Gallbladder stones, bile ducts dyskinesia, the alimentary factor, an inactive mode of life, etc.

5. The symptom of Courvoisier is characteristic for the gall bladder dropsy or atony.

The task №13.

1. Goalbladder stones, bile ducts colique.

2. A sex, age, excessive body weight, pregnancy in the anamnesis, the treatment by the clofibrate, the influence of the estrogen, a nationality.

3. Right n. phrenic us, providing the liver innervation and extrahepatic biliary ways, originates in the same segments of a spinal cord, as the nerves, innervating the neck and the shoulder. The irradiation of the pain is caused by the possibility of transition of the irritation through these nerves.

4. Acholic excrements.

5. The obturation by the gallstone of the choledoch or the main biliary duct, the acute cholecystitis and cholangitis, the empyema of the gallbladder, a gall bladder dropsy, a gall bladder gangrene, gall bladder punching.

The task №14.

1. A liver cancer.

2. The spleen participates in process of destruction of blood cells more actively.

3. A hepatic coma, methastasis in other sites, a bleeding.

4. 9 ± 1сm, 8±1сm, 7±1 cm

5. On the right it is medio-clavicular, on median, on the left costal arch.

The task №15.

1. A Haemolytic jaundice.

2. Haemolytic, parenchimal, mechanical.

3. At parenchimal - with an orange shade, at mechanical - with greenish.

4. At a false jaundice there is no colouring of mucous membranes (eyes).

5. The stool is darkly painted, the urine is dark.

The task №16.

1. Acute cholecystitis.

2. A point of intersection of external edge of the m. rectus abdominis and a costal arch.

3. The pain, appearing at pressing between the branches of the right m. sterno-cleido-mastoideus.

4. Right n. phrenicus, providing the sensitive innervation liver capsules and extrahepatic biliary ways, originates in the same segments of a spinal cord, as the sensitive nerves, innervating the neck, a shoulder. Owing to the ability of excitation transition via these nerves the projection of pain appears is neck zone.

5. In case of the gallbladder dropsy and the cancer of a head of the pancreas.

The task №17.

1. A cirrhosis.

2. A syndrome of the portal hypertension, a syndrome of hepatic insufficiency, a jaundice syndrome.

3. A fluctuation method, a method o percussion.

4. 9-8-7 cm

5. Violation of the syntethic function of liver.

The task №18.

1. A mechanical jaundice.

2. As the jaundice developed slowly and there was no painful syndrome, it is possible to think about compression of the cholrdoch by the tumour of the head of the pancreas.

3. A jaundice syndrome, dyspeptic syndrome.

4. 9-8-7 cm

5. Violation of the bile excretion.

The task №19.

1. A cirrhosis.

2. A bleeding from oesophageal varices - the enlarged veins of the gullet.

3. Telangiectasias.

4. The appearance of cava-caval anastomosis as a sign of the syndrome of portal hypertension.

5. Palmar erythema.

The task №20.

1. A toxic hepatitis.

2. Abusing alcohol, the use of the big dose of alcohol (hepatortopic poison).

3. 9-8-7 cm

4. A liver edge was soft, sharp or slightly rounded off, equal, painless.

5. To the liver cirrhosis.

The TASKS on PULMONOLOGY

The task № 1.

The patient aged 49 years old, has arrived to the hospital with the complaints of the bronchial asthma attack, with the troubles of the respiration, that had appeared 2 hours ago, accompanying the coughing with the expectoration of the poor viscous and transparent sputum. The medical examination revealed that the patient`s status was severe, with the tachypnea (breathing rate was about 30 per minute), the position in the bed was orthopnea. The shape of the thorax transformed to emphysemic one, and the act of expiration was sharply violated.

1. What kind of pathological process we ought to think about ?

2. Why the patient takes the forced position ?

3. Name the basic complaints of the patient with a bronho-pulmonary pathology

4. How the dyspnea with the severely disturbed expiration act is called?

5. How the very viscous and transparent sputum is called?

The task № 2.

The severe dyspnea in the still status may threaten the patient. The patient W. had the left part of the thorax lagging behind while breathing, with the smoothing of the intercostal spaces. Vocal trembling could not be detected lower the III rib edge on all topographical lines.

1. What pathological syndrome are we talking over?

2. What is the Litten`s symptom?

3. Represent the definition of the dyspnea (shortness of breath).

4. What the central (diffusive) cyanosis is marking?

5. Represent the normal number of respiratory movements per minute.

The task № 3.

The 62 years old patient, having the complaints to a shortness of breath, inducing by the physical activity during the last 5 years, was consulted by the general practitioner. Any other complaints were not present. During the inspection the doctor found out the reduction of the chest elasticity, suppression of the vocal trembling on both parts of the thorax. The chest had the barrel-like shape.

1. In what case the similar data could be obtained?

2. Specify the character of the shortness of breath at the given syndrome.

3. Name the kinds of dysonea.

4. What is the vocal trembling?

5. Name the abnormal shapes of the thorax.

The task № 4.

The patient of 34 years has arrived with complaints to a shortness of breathing in rest and at the slightest movements, arised temperature of the body up to 38С, the cough with a small amount of expectorating "rusty" sputum, pains in the right half of the thorax at breath. He had fallen ill sharply, 3 days ago. The medical investigation revealed the diffusive cyanosis and the signs of the herpetic infection. The right half of the thorax lags behind while breathing, The respiratory movements rate was- 36 per minute.

1. What is the most probable localisation and the character of pathological process in lungs?

2. Specify the character of the dyspnea at the given disease.

3. How vocal trembling would change in case of lung diseases?

4. How could we describe the abdominal type of breathing at women?

5. Does the elasticity of a thorax is changed at the actual patient?

The task № 5.

The 68 years old patient of was hospitalized with complaints to a bleeding from the mouth. The right lung cancer was diagnosed few months ago. The patient is sitting in the bed, and it was difficult for the patient because of severe asthenia. The skin was pale, without elasticity, While coughing the moderate quantity of scarlet foamy blood with the alkaline reaction was expectorated. The rate of the respiratory movements is 30 per minute.

1. How the above-mentioned symptom is called?

2. What could confirm the pulmonary site of bleeding?

3. How vocal trembling would change over the site of the pathological process in a lung?

4. What is the character of the dyspnea in the given disease?

5. The character of the sputum in the actual disease?

The task № 6.

The patient С., 28 years old, was placed to the hospital because of severe pains in the right half of the thorax, strengthening at a deep breath, a dyspnea at physical activity, the rise in temperature of a body up to 38,2 C. The patient С. lies on the right side of the chest. The movement of the right half of the thorax were lagging behind while breathing.

1. What most probable localisation of the pathological process?

2. How vocal trembling over the site of the pathological process in the lung would change?

3. Name the kinds of dyspnea?

4. Name the reasons of strengthening of vocal trembling.

5. What it is possible to reveal by means of the method of the chest palpation?

The task № 7.

The patient G. 70 years old has arrived in the hospital. His main complaints was the severe shortness of breath in still status. The patient was sitting in the bed, having his hands leaned. He had marked diffusive cyanosis. The breathing was noisy, stridorous, audible on the distance. The breathing is laboured and with the expiratory troubles.

1. What is the most plausible reason for the dyspnoe?

2. What is the stridorous breathing?

3. What is the central cyanosis the marker of?

4. How the dyspnea with the laboured breathing and the expiratory troubles is called?

5. What it is possible to detect by means of a thorax palpation?

The task № 8.

The patient К., 41 years old, was consulted by the doctor. The patient complained to the morning coughing and expectorated small amount of muco - purulent sputum. At physical activity he notised the weakness and sweating. The cough disturbed the patient for 4 years. From the life anamnesis: a pneumonia occurred one year ago. Smoking of 20-25 cigarettes per day was common for the patient from the 20-year-old age.

1. What is the most probable localisation and the character of lung disease?

2. Namethe basic complaints of the patient.

3. How vocal trembling would change at the actual pathological syndrome?

4. Specify the examples of the forced position of the patient with diseases of the bronchopulmonary system.

5. What is it “the acinus”?

The task № 9.

In the hospital the 56 years old patient М. has arrived. He had complaints on the coughing with the expectoration of about 300 ml per day of the sputum with a very nasty smell. The cough enforced when the patient took the position in the bed on the right side of the body. The medical investigation revealed the positive symptoms of "drum-type fingers» and «hour glasses». What about the life anamnesis it was found that the patient had twice a heavy double pneumonia.

1. What is the most probable cause of a disease?

2. Why did the cough of the patient intensified in right side position in the bed?

3. How is it possible to explain the reason of the symptoms like "drum-type fingers» and «hour glasses»?

4. Where is passing the projection of the border between the top and average parts of the right lung on the anterior part of the thorax ?

5. How to explain the nasty smell of the sputum?

The task № 10.

The 52 years old patient C. has arrived to the hospital with the complaints to the pains in the right half of the thorax, enforced at breath, on the silent dry cough accompanied by the pain in the right half of the thorax, the rise of the body temperature up to 37,2 C. The patient C. was sitting and pressing by the hand the right half of thorax. The right half of the thorax lags behind while the breath movements were passing.

1. What was the most probable localisation and the character of pathology in the lungs?

2. How vocal trembling would change over the afected lung?

3. Name the reasons of slacking of the vocal trembling. Present the examples.

4. What is the cause of the pain in the thorax?

5. How the dyspnea associated with troubles of breathing is called?

The task № 11.

The 42 years old patient C. has arrived to the hospital with the complaints to the right half of the patient`s thorax was lagging behind in the breathing, vocal trembling lower the 3-th ribs was stressed, a percussion sound is dull and tympanic, below 3-th ribs edge the vocal trembling is not defined, the percussion sound is dull. The right half of the thorax lags behind while the breath movements were passing.

1. What pathological syndrome are we speaking about?

2. Give the physical characteristic of the dull percussion sound in the lungs?

4. Name the types of the percussion.

5. What is the aim of comparative percussion of lungs?

The task № 12.

The doctor revealed in the Patient M. after the medical inspection the following signs: symmetric decrease in mobility of the thorax, the omission of the bottom borders of lungs, box-like percussion sound of the thorax

1. What pulmonary syndrome it is characteristic for?

2. How the field of Kronig would have changed its positions at the given syndrome?

3. Specify the normal parameters of the fields of Kronig.

4. Specify an arrangement of the bottom border of lungs on a medial axillary line in norm.

5. What type of the percussion could be used to define of the upper borders of the lungs? How this type of the percussion is performed?

The task № 13.

At the Patient L. the medical inspection revealed: the position of upper borders of the lungs anteriorly was 1 cm above a clavicle, dull percussion sound, vocal trembling was not defined.

1. What kind of pulmonary syndrome has such a characteristic?

2. Specify the possible reasons of the presented syndrome

3. Where the upper boarder of the lung (the top of the lung) is normally located in comparison of the vertebrae?

4. Give the physical characteristic of the distinct pulmonary sound.

5. What type of the percussion could be used to define of the lower borders of the lungs?

The task № 14.

The 45 years old Patient B. has arrived to the hospital with the complaints to the acute dyspnea, accompanying the slightest physical efforts and rare dry cough. Objectively: the left half of the patient`s thorax was lagging behind in the breathing, with the smoothing of intercostal intervals. Vocal trembling in the left part of the thorax lower the 4-th rib edge according all topographical lines is not defined. The percussion on the same side presented the absolutely dull sound. The space of Traube was not defined.

1. What kind of pulmonary syndrome has such a characteristic?

2. Specify the possible reasons of this syndrome.

3. What is the space of Traube?

4. What percussion sound is detected over the space of Traube in healthy persons? Describe its physical characteristics.

5. How to explain changing of percussion sound over the space of Traube?

The task № 15.

The 55 years old Patient Z. arrived to the reception of the hospital. He had the rise of the temperature up to 40,5°С with chillings, the cough with the expectoration of poor mucopurulent sputum. It was sick for 2 days. Objectively: the left half of the patient`s thorax was lagging behind in the breathing certificate a little. Vocal trembling from the left the scapular line to the posterior axillary lines from 6 to 9 edges of the ribs was stressed. On the same site the percussion sound was dull.

defined.

2. Give the physical characteristic of the dull percussion sound.

3. How to explain the occurrence of the dull percussion sound?

4. At what level there is a lower border of a lung on the posterior axillary line in healthy persons?

5. What kind of percussion is applied for the detection of the lower borders of lungs?

ANSWERS for the TASKS upon PULMONOLOGY

The task №1.

1. A bronchial asthma, a prolonged attack.

2. In orthopnea position the humeral belt is fixed and while breathing the auxiliary muscles of a neck, a back and pectoral muscles participate in the respiratory movements.

3. Cough, sputum, blood spitting or haemoptysis, pains in the thorax, associated with cough, breath; the shortness of breath, asthma attacks.

4. Expiratory

5. Vitreous

The task №2.

1. A liquid or gas congestion in a pleural cavity (hydrothorax or pneumothorax).

2. A smoothness or bulging of the intercostal spaces because of the hydrothorax or pneumothorax

3. Subjective feeling of shortage of air, accompanied by infringement of frequency, depth and a rhythm of respiratory movements.

4. About insufficient oxygenation of blood in lungs

5.16 - 20 respiratory movements per minute

The task № 3.

1. Decrease in elasticity of lungs owing to an emphysema of lungs.

2. Expiratory

3. Physiological, pathological. Subjective, objective. Inspiratory, exiratory, mixed.

4. The trembling of the thorax detected by means of palpation, based on the resonance phenomena

5. Emphysemic, funneled, paralytic, scaphoid.

The task № 4.

1. Acute pneumonia of the right lung.

2. Inspiratory

3. Will amplify

4. Because of affaection of the diaphragm

5. No.

The task № 5.

1. Blood spitting (haemoptoe)

2. Is confirmed by the alkaline reaction of blood

3. Will amplify

4. Inspiratory

5. The type «Crimson jelly»

The task № 6.

1. Pleura defeat (a dry pleurisy).

2. Will be weaker.

3. Inspiratory, expiratory, mixed.

4. At consolidation of the pulmonary tissue (a pneumonia, a tuberculosis, a lung heart attack), in case of the compression atelectasis, over the lung cavities (an abscess, a bulla).

5. Morbidity, elasticity, vocal trembling.

The task №7.

1. A mechanical obstruction of the higher respiratory ways

2. Noisy faltering breath

3. About insufficient oxygenation of blood in lungs

4. Mixed

5. Painful sites, width of intercostal intervals, vocal trembling, elasticity and rigidity of the thorax, the sound of the pleural friction

The task № 8.

1. Chronic inflammatory process in the bronchial tubes (bronchitis)

2. Cough, sputum

3. Will not change

4. Orthopnea (a bronchial asthma), the affection of the hemithorax (a pleurisy, a lung abscess), position for the better drainage for easier expectoration of the sputum

5. The acinus is the structural and functional unit of the lung including respiratory bronchiolae, alveolar airways and alveolar sacks with alveoluses

The task № 9.

1. Chronic inflammatory process in a lung (a chronic abscess of a lung)

2. At the expense of improvement of drainage function of lungs

3. Owing to the proliferation of soft tissues of distal phalanxes

4.4 edge

5. Fiber disintegration in the sputum because of the activity of anaerobic bacteria

The task № 10.

1. A syndrome of the pleural affection (a dry pleurisy).

2. Weakens

3. At increase of pulmonary tissue airiness and the decrease of elasticity of the alveoluses (a lung emphysema), obturative athelectasis (alien body), dyslocation of the lung in the thorax (insignificant hydrothorax and pneumothorax, pleural adhesions).

4. The pleura is involved in pathological process

5. Inspiratory

The task №11.

1. A syndrome of presence of the liquid in a pleural cavity.

2. Short, high, silent.

3. Loud

4. Direct, mediated, silent, loud, comparative and topographical.

5. Revealings of pathological processes in the lungs and pleural cavity.

The task №12.

1. A syndrome of increase of the pulmonary tissue airiness (an emphysema of lungs)

2. Will increase

3.4-6 cm

4.8 edge.

5. Quietest (threshold). The sound wave gets deep into the tissue on 2-3 see

The task №13.

1. Compression atelectasis

2. Hydrothorax or pneumothorax

3. By 2 cm exteriorly from the processus spinosus of the 7-th cervical vertebra.

4. Low, loud, long, not tympanic.

5. Mild percussion.

The task №14.

1. A syndrome of presence of a liquid in a pleural cavity

2. An exudative pleurisy, double-sided hydrothorax

3. A gas bubble of a stomach.

4.Tympanic. Low, loud, long, with a musical shade.

5. A liquid congestion in the left pleural cavity.

The task №15.

1. A syndrome of local consolidation of a pulmonary tissue (a local pneumonia).

2. Short, high, silent.

3. The pulmonary tissue became of low-density

4. At level of 9-th edges of ribs.

5. Silent (percussion blow of average force)