The presence of agranulocytosis was determined in the blood analysis of a liquidator of accident at Chernobyl atomic power station who had got 5 Gr dose of irradiation. What pathogenetic mechanism is the leading one in its appearance?
Inhibition of leucopoiesis
Increased penetration of granulocytes into tissues
Increase of leucocytes destruction
Impairment of going out of mature leukocytes from bone marrow
Development if autoimmune process

Neutropoenia is found out in a patient who has the manifestation of immunodeficiency. What disease may neutropoenia be determined in?
After profuse hemorrhage
Fuzarium fungus poisoning
Myeloleukemia
Insufficiency of sexual gland function
Septic process

Functional insufficiency of monocytes is accompanied by immunodeficiency. What BAS produced by monocytes stimulate specific response?
Interleukin-1
Interleukin-2
Lysocime
Fibronectin
Myeloperoxidase

Relative neutropenia with degenerative shift was revealed in the blood of a patient with TB during examination. What change of differential blood count corresponds to this state?
Decrease of the number of segmented forms and increase of band forms of neutrophils
Decrease of lymphocyte number
Increase of monocyte number
Increase of basophil number
Decrease of eosinophil number

Neutrophil leukocytosis was revealed in worker during examination. What pathologic condition may neutrophil leukocytosis result from?
Septic condition
Chronic loss of blood
Vital infection
Radiation sickness
Benzene poisoning

A patient aged 32 with massive hemorrhage due to car accident trauma was admitted to the hospital. Pulse - 100 beats per min, respiratory rate - 22 per 2 min, BP - 100/60 mmHg. What blood change will be the most characteristic in an hour after hemorrhage?
Hypovolemia
Erythropoenia
Hypoproteinemia
Leucopenia
Erythrocyte hypochromia

The experiment was carried out on a rabbit. The increase of the number of erythrocytes and hemoglobin in the blood due to the stimulation of erythropoiesis by erythropoietin was determined 2 weeks later after the narrowing of renal artery. What increases the formation of erythropoietin?
Hypoxemia
Hypoosmia
Hypercapnia
Heperosmia
Hypovolemia

B_{12}-folic deficiency anemia development in a patient after stomach resection. What color index is typical for this disease?
1.30
1.15
1.0
0.85
0.70

A victim of a car accident has lost much blood. What impairment of general blood volume takes place?

Oligocythemic hypovolemia
Simple hypovolemia
Polycythemic normovolemia
Olygocythemic normovolemia
Polycythemic hypovolemia

Posthemorrhage anemia has developed in a patient with periodical bleeding due to uterus fibromyoma. What type of chronic post hemorrhagic anemia takes place in this case?
Erythroblastic, hypochromic, hyporegenerative
Megaloblastic, hyperchromic, hyperregenerative
Megaloblastic, hypochromic, hyporegenerative
Erythroblastic, hyperchromic, hyporegenerative
Erythroblastic, hypochromic, hyperregenerative

A female patient with impairment cycle accompanied by prolonged bleeding the blood analysis was made which hypochromia, decrease of reticulocytes, microcytosis. What group does this anemia belong to according to pathogenesis?
Iron deficiency anemia
B_{12}-folic deficiency anemia
Hypoplastic anemia
Hemolytic anemia
Metaplastic anemia

Which of the below given hematological characteristics corresponds to chronic post-hemorrhagic anemia?
Hyporegenerative, hypochromic with megaloblasts types of bleeding
Hyporegenerative, hypochromic with erythroblasts types of bleeding
Hyperregenerative, hypochromic with erythroblasts type of bleeding
Regenerative, hypochromic with erythroblasts types of bleeding
Hyporegenerative, hyperchromic with megaloblasts types of bleeding

Hypochromic anemia was diagnosed in a patient on the 7th day after acute hemorrhage. What mechanism is the leading one in its development?
Increased penetration of immature erythrocytes from bone marrow
Increase of iron extraction from the organisms
Impairment of globin synthesis
Increased erythrocyte destruction in the spleen
Impairment of iron absorption in the intestine

A patiens aged 43 has stomatitis, glossitis, the tongue us crimson color, smooth. Blood analysis revealed: Hb 100 g/l; erythrocytes $2.3x10^{19}$/l; color index 1.30. What is the patients state due to?
Vitamin B_{12} deficiency
Erythrocytes hemolysis
Hypoplasia of red bone marrow
Impairment of porphyrin synthesis
Iron deficiency

After resection of small intestine a patient complained of increased fatiguability, infringement if taste, brittleness of nails, quick decay of dental enamel, and appearance of breathlessness in physical exertion. Which of the bellow given substances is source of impairments in the patients organisms?
Iron deficiency anemia
B_{12}-folic deficiency anemia
Hypocalcemia
Vitamin D deficiency
Hyponatriaemia

A women fell ill with purulent stomatitis. What index if complete blood count is characteristic for this disease?
Leukocytosis
Lymphocytosis
Thrombocytosis
Anemia
Monocytosis

Extraction of a tooth, in a patient with chronic lymphocytic leukemia, was complicated by prolonged bleeding. What may cause the hemorrhagic syndrome in this patient?
Thrombocytopenia
Anemia
Lymphocytosis

Eosinopenia
Neutropenia

A 40-years-old patient, who was bitten by snake, was attempted to the hospital. What place does hemolysis occur at in this case?
In vessels
In hepatic cells
In the spleen
In the bone marrow
In renal parenchyma

What is the cause of intracellular hemolysis?
Genetic infringements of erythrocytes
Malaria
Action of hemolytic poison
Infection with hemolytic streptococcus
Transfusion of incompatible blood

What kind of disorders of total blood volume appears in case of absolute erythrocytosis?
Polycythemic hypervolemia
Oligocythemic hypervolemia
Oligocythemic hypovolemia
Simple hypervolemia
Simple hypovolemia

During the examination of adolescents that reside in mounting region increase in level of erythrocytes and hemoglobin in peripheral blood was found out. What is the reason for indicated erythrocytosis?
Exogenous hypoxia
Diseases of lungs
Congenital heart disease
Condensation of blood due to large of water
Vakez's disease

Content of hemoglobin and number of erythrocytes significantly decreases in a patients blood from time to time. It was found out that such attacks appear after taking some horse beans. What kind of anemia takes place in this case?
Enzymopathy
Membranopathy
Iron deficiency anemia
Hemoglobinonopathy
Acquired hemolytic anemia

Anemia, leuko- and thrombocytopenia, color index 1.3, presence of megaloblasts and megalocytes were determined in the laboratory analysis of blood of a patient a year later after he was operated own for subtotal resection of the stomach for the ulcer of lesser curvature of the stomach. What factor deficiency results in these changes?
Gastromukoprotein
Gastrin
Pepsin
Chlorine hydrate
Mucin

Amino acids replacement in alpha and beta chains of hemoglobin takes place in number of hemoglobinopathies. Which of them is typical for HbS (sickle-cell anemia) ?
Glutamate to valine
Glycine to serine
Aspartate to lysine
Methionine to histidine
Alanine to serine

Hereditary microspherocytic hemolytic anemia (Minkovsky-Shoffar disease) was diagnosed in a women aged 34. What mechanism caused hemolysis of erythrocytes in the patients?
Membranopathy
Enzymophaty
Hemoglobinopathy
Autoimmune impairment
Hypoplasia of bone marrow

Megaloblastic anemia was diagnosed in a patient. What substance deficiency may cause the development of this disease?

Cyanocobalamin
Cholecalciferol
Magnesium
Glycine
Copper

Thee years ago man aged 45 was operated on for stomach resection. After the operation the content of erythrocytes in the blood is $2.0x10^{12}$, Hb 85 g/l, color index 1.27. What vitamin absorption is impaired that causes the change of erythropoiesis?
B_{12}.
C
P
A
B_6

A patient, carrier of hereditary sickle-cell erythrocytes anomaly, had pneumonia accompanied by hemolytic crisis and development of anemia. What is the main cause of hemolytic crisis in this case?
Hypoxia caused by pneumonia
Hyperoxia
Heterozygosis gene
Hypoxia of structural gene
Blood osmolarity change

Examining the oral cavity of a patient, a dentist paid attention to the presence of inflammatory-dystrophy process in the mucous membrane (Gunter's glossitis, atrophic atomatitis). Blood analysis revealed hyperchromic anemia. What factor is a cause of this disease?
Hypovitaminosis B_{12}
Hypovitaminosis B_6
Hypovitaminosis A
Increase of stomach juice acidity
Hypovitaminosis B_1

Afemale patient complains of malaise weakness, breathlessness, rapid fatiguability, and dizziness. Her blood test data: erythrocytes - $1.8x10^{12}$/L, Hb - 80 g/l, leukocytes - $3.2x10^{9}$/L, color index - 1.5. Anisocytosis, poikilocytosis, megaloblasts, megalocytes were found in smear. What is the possible diagnosis?
B_{12}-deficiency anemia
Posthemorragic anemia
Acute leukemia
Iron deficiency anemia
Immunohemolytic anemia

A patient, aged 50, complains of a bad appetite, loss weight, weakness, pain in the stomach area, and eructation. At laboratory examination of him: Hb - $2x10^{12}$/L, stomach secretion 0.4 1, pH of stomach juice - 7. Pernicious anemia is diagnosed in this patient. What compound of gastric juice deficiency is the cause of the disease?
Castle's factor
Pepsin
. Renin
Secretin
HCL

On the seventh day after hemorrhage caused by a trauma, the following was revealed in a patients blood: erythrocytes - $2.8x10^{12}$/L, Hb - 3.9 mmol/l, reticulocytes - 15%, acidophilic and polychromatophilic normoblasts were found in smear. What is the mechanism of appearance of regenerative forms of blood erythrocytes?
Intensification of regeneration of erythroid cells in bone marrow
Going out go blood deposition
Increase permeability of regeneration of erythroid sprout of bone marrow
Inhibition of maturation of erythroid cells in bone marrow
Inhibition of synthesis of erythroprotein inhibitor

B_{12}-folate deficient anemia was diagnosed in a patient aged 55. What hematological index will be the most sensitive for pathogenetic treatment?
Reduction of anisocytosis
Increase of number of erythrocytes
. Increase of number of reticulocytes
Decreas of ESC
Decrease of amount of hemoglobin

In pregnant women, in the 7th month of pregnancy, anemia begins rising fast. In her blood test: number of erythrocytes is $2.7x10^{12}$/L, amount of hemoglobin is 90 g/L, anisocytosis, poicilocytosis, megaloblasts and megalocytes were found, reticulocytes of 0%. What sort of anemia develops in this case?
B_{12}-deficiency anemia
Thalassemia
Post-hemorrhagic anemia
Iron-deficiency anemia
Hemolytic anemia

In an infant, who is under an artificial nutrition with cow milk, severe anemia has developed. At the blood count of the infant: number of erythrocytes is $4x10^{12}$/L, content of hemoglobin is 69 g/l. reticulocytes of 0%. What kind of anemia developed in the infant?
Iron-deficiency anemia
Sickle-cell anemia
Inborn hemolytic anemia
B_{12}-deficiency anemia
Hypopastic anemia

Predomination of erythroblasts, normoblasts and megaloblasts was revealed in blood analysis pf a patient with anemia. The same cells were found in bone marrow. What type of anemia do these changes characteristic for?
B_{12}-folate deficiency anemia
Pors-hemorrhagic
Hemolytic
Aplastic
Iron-deficiency anemia

Singular oxyphilic normoblasts appeared in the blood of a patient after acute post-traumatic hemorrhage composing 15% of blood volume. On supra vital staining 25% of reticulocytes were found. What is the patient anemia according to its ability of regeneration?
Hyperregenerative
Regenerative
Hyporegenerative
Aregenerative
Hypo- and aregenerative

What index of blood analysis is the most typical for beta-thalassemia?
Increase of fetal hemoglobin
Considerable decrease of erythrocytes and hemoglobin
Erythrocytes with basophilic stippling
Target-like erythrocytes
Increase of met-hemoglobin

A patient had anemia due to profuse blood loss. What blood changes are typical at the beginning of development of acute post-hemorrhahig anemia?
Normochromia
Presence of megalocytes in the blood
Absence of reticulocytes
Poikilocytosis, anisicytosis
Hyperchromia

Erythropenia, hyperchromia, normocytes, macrocytes, megalocytes, poikilocytosis were found out in a patients blood at examination. What is the cause of this pathology?
Deficiency of gastromucoprotein
Ascaridosis
Iron deficiency in food
Trichocephaliasis
Fequent loss of blood

While studying a blood smear different forms of erythrocytes were found. Which of them are regenerative?
Anisocytes
Poikilocytes
Ploychromatophilis
Ovalocytes
Megalocytes

The experiment was carried out on a rabbit. The increase of the number of erythrocytes and hemoglobin in the blood due to the stimulation of erythropoiesis by erythropoietin was determined 2 weeks later after the narrowing of renal artery. What increases the formation of erythropoietin?
Hypoxemia.
Hypoosmia
Hypercapnia
Hyperosmia
Hypovolemia

A female patient complains of malaise, weakness, breathlessness, rapid fatiguability, an dizziness. Her blood test: erythrocytes - $1.8x10^{12}$/L, Hb - 80 g/l, leukocytes - $3.2x10^{9}$/l, color index - 1.5. Anisocutosis, poikilocytosis, megaloblasts, megalocytes were found in s,ear. What is the possiblee diagnosis?
B_{12}-deficiency anemia
Posthemorrhagic anemia
Acute leukemia
Iron deficiency anemia
Immunohemolytic anemia

Erythropenia, hyperchromia, normocytes, macrocytes, megalocytes, poikilocytosis were found out in a patients blood at examination. What is the cause of this pathology?
Deficiency of gatomucoprotein
Ascariasis
Iron deficiency on food
Trichocephaliasis
Fequent loss of blood

The presence of agranulocytosis was determined in the blood analysis of a liquidator of accident at Chernobyl atomic power station who had got 5 Gr dose of irradiation. What pathogenetic mechanism is the leading one in its appearance?
Inhibition of leucopoiesis
Increased penetration of granulocytes into tissue
Increase of leucocytes destruction
Impairment of going out of mature leukocytes from bone marrow
Development of autoimmune process

During the development of acute pulpitis a patient complained of paroxysm of pain in the upper jaws, which is increasing at night, fever. At examination leucocytosis was established in the blood. What king of leucocytosis is possible in this case?
Neutrophilic leucocytosis
Basophilic leucocytosis
Lymphocytosis
Eosinophilic leucocytosis
Monocytosis

Considerable increase of the number of eosinophilia in a unit of blood volume was determined during the examination of a 5 years old boy. What may cause eosinophilia in this patient?
Helminthic invasion
Obesity
Hypodynamia
Hypotermia
Physical exertion

In the patients blood analysis the number of leukocytes is $250x10^{9}$/l. What syndrome does this patient have?
Leukemia
Leucocytosis
Leucopenia
Leuconoid reaction
Hyperleucocytosis

Leucocytosis was found out in a person who didn’t complain of his health. The cause of this may be that fact the blood was taken for analysis after:
Physical load
Mental work
Rest at a health resort
Considerable use of water
Usage of alcohol

Lymphocytosis was revealed in a patient. What diseases may be accompanied by lumphocytosis?

Pertussis, chicken pox
sepsis
Helminthic invasion
Somatotropin insufficiency
Bronchial asthma

Neutropenia is found out in a patient who has the manifestations of immunodeficiency. What diseases may neutropenia be determined in?
Fuzarium fungus poisoning
After profuse hemorrhage
Myeloleukemia
Insufficiency of sexual gland function
Septic process

Increase of the number of eosinophilis was determined in a patient with endorphins pathology during examination. Which of the named diseases may be accompanied by eosinophilia?
Acromegaly
Pheochromocytoma
Conn's disease
Cushing disease
Addison's disease

Functional insufficiency of monocytes is accompanied by immunodeficiency. What BAS produced by monocytes stimulate specific response?
Interleukin-1
Interleukin-2
Lysocime
Fibronectin
Myeloperoxidase

Relative neutropenia with degenerative shift was revealed in the blood of a patient with TB during examination. What change of differential blood count corresponds to this state?
Decrease of the number of segmented forms and increase of band forms of neutrophils
Decrease of lymphocyte number
Increase of monocyte number
Increase of basophil number
Decrease of eosinophil number

Neutrophil leukocytosis was revealed in worker during examination. What pathologic condition may neutrophil leukocytosis result from?
Chronic loss of blood
Septic condition
Vital infection
Radiation sickness
Benzene poisoning

A patient aged 32 with massive hemorrhage due to car accident trauma was admitted to the hospital. Pulse - 100 beats per min, respiratory rate - 22 per 2 min, BP - 100/60 mmHg. What blood change will be the most characteristic in an hour after hemorrhage?
Hypovolemia
Erythropoenia
Hypoproteinemia
Leucopenia
Erythrocyte hypochromia

During the examination of peripheral blood of a patient aged 42. it was revealed: Hb-80g/l, erythrocytes - $3.2x10^{12}$/L, leucocytes - $25x10^{9}$/l, leukocytic formula: basophilic - 5%, eosinophils - 9%, myeoblasts - 3%, promyelocytes - 8%, neutrophils - 17%, segmented - 19%, lymphocytes - 3%, monocytes - 3%. What blood pathology is the most possible in this patient?
Chronic myelogenous leukemia
Panmyelophthysis
Erythroleukemia
Acute myeloblsat leukemia
Promyelocytic leukemia

The experiment was carried out on a rabbit. The increase of the number of erythrocytes and hemoglobin in the blood due to the stimulation of erythropoiesis by erythropoietin was determined 2 weeks later after the narrowing of renal artery. What increases the formation of erythropoietin?
Hypoxemia
Hypoosmia
Hypercapnia
Hyperosmia
Hypovolemia

What condition are accompanied by neutrophilic leukocytosis with shift of different count to the left?
Purulent inflammation
Tuberculosis
Infections mononucleosis
Agranulocytosis
Alimentary leukocytosis

Patient R. aged 12 was operated on for acute phlegmonous appendicitis. At the examination of his blood, the amount of leukocytes is $12x10^9$/L. On the blood smear there are: basophils - 0%, eosinophils - 2%, monocytes - 2%, juvenile neutrophils - 0%, stab neutrophils - 30%, segmented neutrophils - 43%, lymphocytes - 23%, monocytes - 0%. Stab (immature) neutrophils have pyknosis of nuclei. There is anisocytosis of neutrophils, some of them have toxic granulation. What form of change of leukocyte blood composition takes place in this case?
Leukemoid reaction of neutrophil type
Neutrophilia with degenerative shift to the left
Neutrophilia with regenerative shift to the left
Neutrophilia with hyperregenerative shift to the left
Neutrophilia with the shift ti the right

Neutrophil leukocytosis is determined in the patient with chronic myelogenous leukemia. Which variant of nuclear shift of differential count to the left is the most typical for clinic myelogenous leukemia?
Hyper regenerative
Regenerative
Degenerative
Regenerative and degenerative
Hyporegenerative

A patient with atrophic gastritis has vitamin B_{12} deficiency. What variant of nuclear shift of differential count is most typical for B_{12} hypovitaminosis?
To the right
Hyper regenerative to the left
Degenerative to the left
Regenerative an degenerative to the left
Regenerative to the left

What blood pathology is the presence ofPhiladelphia chromosomes in the blood cells and bone marrow cells typical for?
Chronic myelogenous leukemia
Acute myelogenous leukemia
Hodgkin’s disease
Burkitt’s lymphoma
Chronic lymphocyte leukemia

Patient M. aged 20 was admitted to the hospital complaining of high temperature, pain in the bones, and hemorrhage from his gums. Blood analysis ofthis patient shows: erythrocytes-2.5x1012/L; Hb-8Og/L; leucocytes-2.0x109/L; thrombocytes-6.Ox109/L; differential count: eosinophils-1%; stab neutrophils-l%; segmented neutrophils-10%; lymphocytes-10%; monocytes-3°/o; blast cells-75%. What pathology is this blood analysis typical for?
Acute leukemia
Hodgkin’s disease
Burkitt’s lymphoma
Infections mononucleosis
Chronic leukemia

General amount of leucocytes is 9Ox109/l. In differential count: eosinophils-l%; basophils-O%; juvenile neutr'ophils-O9/o; stab neutrophils-2%; segmented neutrophils-20%; prolymphocytes-2%; lymphocytes-70%; BotkimGumprecht cells. Cervical, submandibular lymph nodes are enlarged. What pathology is such blood picture typical for?
Chronic lymphocytic leukemia
Acute lymphoblastic leukemia
Hodgkin’s disease

Infectious mononucleosis
Chronic myelogenous leukemia

Hypochromic anemia was found out in a patient aged 54, who had a prolonged contact with lead at his work. Treatment with iron preparations for a month didn't give any effect. The increased amount of iron was determined in blood serum. What is this anemia due to?
Hypoplasia of red bone marrow
Vitamin B12 deficiency
Porphirin synthesis impairment
Folic acid deficiency
Erythrocyte hemolysis

Posthemorrhagic anemia has developed in a patient with periodical bleeding due to uterus fribromyoma. What type of chronic post hemorrhagic anemia takes place in this case?
Erythroblastic, hypochronic, hyporegenerative.
Megaioblastic, hyperchromic, hyperegenerative.
Megaloblastic; hypochromic, hyporegenerative.
Erythroblastic, hyperchromic, hyporegenerative.
Erythroblastic, hypochromic, hyperregenerative.

A female patient, aged 25, was admitted to the hematological department with complains of the appearance of hemorrhages of different sizes on the body; during menstruation there are uterine bleedings. She has been ill for ten years. Paleness of skin and mucous membranes were determined on examination; there are hemorrhages of different size and color on the upper and lower extremities. Pulse = 100 beats/minute, AP 110/70 mmHg. Blood analysis shows: erythrocytes 3.3"'1012 /L, Hb 8og/L, V thrombocytes 33* 10%; time of blood coagulation: beginning is at 2nd minute, end is at 6th minute; time oi'bleeding (according to Duke) - 15 minutes. What is the possible diagnosis?
Thrombocytopoenic purpura.
Marchiafava-Michelli disease.
Glanzman's thrombasthenia.
W illeberandt-Yurgens thrombocytopathia
Chronic myelogenous leukemia.

Hemiparesis appeared in a patient with acute promyelocytic leukemia. What is the main mechanism of the impairment of CNS in this case?
Formation of leukemic infiltrates;
Intoxication by leukemic cells decay products;
lmpairment of desintoxicative function of the liver;
Cachexia;
Increase of thrombogenesis.

A female patient took analgin because of toothache. Dark urine, icteric sclera, weakness appeared in her two days later. Which of the causes given below is the most possible one?
Immune hemolytic anemia
Hypoplastic anemia
Thrombocytopoenia
Thrombocytopathy
Agranulocytosis

Enlargement of liver and spleen, anemia, and myeloblasts in peripheral blood were revealed in a patient with acute leukemia. What is the main trait, which allows to distinguish acute myelogenous leukemia tram chronic one?
Leukemic gap
Pancytopoenia
Blast cells in peripheral blood
Anemia
Thrombocytopoenia

Extraction of a tooth, in a patient with chronic lymphocytic leukemia, was complicated by prolonged bleeding. What may cause the hemorrhagic syndrome in this patient?
T hrombocytopoenia
Anemia
Lymphocytosis
Eosinopoenia
Neutropoenia

A patient with leukemia has general number of leukocytes of 120.ox109/L. What kind of leukemia does this patient have?
Leukemic

Leucopenic
Subleukemic
Aleukemic
Erythremia

Patient with chronic leukemia has sharply increased temperature, breathlessness, marked muscular weakness at insignificant physical exertion, increased sweating, cough. What mechanism of leukemia e influence upon organism underlies complications in this patient?
Immunodeficiency due to fiinctional inability of leukocytes
Internal bleeding because metastases into vessel wall
Anemia
Tumor progression
Airway obstruction because of development of metastase

A patient addressed a dentist with complaints of affections of mucous membrane of his mouth. During the examination of the patient ulcerous stomatitis with necrosis in center was revealed at him in area of his palate. In the history of disease of the patient recently endued pneumonia and taking of medicines sullbnilamides) were present. After administering treatment the doctor pointed the patient for blood anaiysis. What pathology from below mentioned does doctor suppose?
Immune agranulocytosis
lRon deficiency anemia
Thorombocytopoenia
infectious mononucleosis
lntetn‘ious lymphocytosis

Miocardial infarction was diagnosed in 65-years-old man. Neutrophilic leukocytosis with left shift is present in the blood of this patient. What factors underlie this phenomenon?
Products ot‘tissue decay
Elevation of mass of muscular fibers
Disorders of alveolar ventilation
Decrease in glycogen content in the myocardium
increase of arterial pressure

Increased concentration of leukopoietins in blood was found in a patient with leth appendicitis. What kind of lekocytosis occurs in these conditions?
Neutrophilic
Basophilic
Eosinophilic
Monocytotosis
No correct answer

A patient has deficiency of cyancobalamine and folic acid that leads to disorder of leucopoiesis. What changestakes place in these conditions?
Leucopoenia
Eosinophilia
Basophilia
Hemophilia
Hyperemia

A patient, who was exposed to ionizing radiation, has panmyelophtisis and secondary infections. What changes occur in blood analysis in this case?
Agranulocytosis
Leucocytosis
EOsinophilia
Basophilia
Hyperemia

When examining a blood in a patient, who endued bleeding three days ago, following data was revealed: number of leukocytes is 12x109/L, basophils count is 0%, eosinophils count is 3%, myelocytes count 0%, l juvenile neutrophils count is 3%, stab neutrophils count is 12%, segmented neutrophils count is 62%, Limphocytes count 16%, and monocytes count is 4%. What kind of changes of leukocyte differential count takes place in this case?
Neutrophilia with regenerative shift to the left
Neutrophilia with degenerative shift to the left
Neutrophilia with shift to the right
Absolute lymphopoenia
Absolute monocytopoenia

40-years-old patient, who was admitted to the surgical department with diagnosis of phlegmona of thig‘n. had high temperature, tachycardia, and breathlessness. On the blood test of this patient: number of leukocytes is 25x109/L; eosinophils count is 1%, myelocytes count is 1%, juvenile neutrophils count is a 15%, band neutrophils count is 25%, segmented neutrophils count is 40%, lymphocytes count l4%, monocytes count is 4%. What kind of shift in differential count is present in this case?
Hyperregenerative
Regenerative
Degenerative
Regenerative-degenerative
Leukemoid

A patient with acute pulpitis has an increased body temperature and a number of leukocytes up to 14.10/9 L differential count represents: basophils-0%; eosinophils-2%; megakaryocytes-0%; juvenile neutrophiis-2%; stab neutrophils-8%; segmented neutrophils-58% lymphocytes-26%; monocytes-4% How can you evaluate such changes in blood?
Neutrophilic lekocytosis with regenerative SHIFT to the left
Neutrophilic lekocytosis degenerative shift to the left
Neutrophilici lekocytosis with hyperregenerative shift to the left
Lymphocytosis
Neutrophilic leukocytosis with shift to the right

A patient aged 30 took sulfaethidole for infectious process of mucous membrane in the mouth locally (as ponder). Preparation has hemotoxic action and the treatment was complicated by the development of agranulocyrosis. At examination it was revealed:
Decrease ot‘the number of granulocytes in the blood on the background of leucopoenia;
Increase of agranulocytes in the blood;
Decrease ot‘the number of granulocytes in the blood on the background of leukocytosis;
Decrease of the number of neutrophylic granules with their simultaneous increase;
Loss of their granules by granulocytes.

A W\omeN. fell ill with purulent stomatitis. What index of complete blood count is characteristic for this disease?
Leukocytosis
Lymphocytosis
Thrombocytosis
Anemia
Monocytosis

It is recommended to perform a clinical examination of blood in an empty stomach. What compounds of peripheral blood may be changed after taking food?
Elevation of number of leukocytes
Decrease in number of platelets
Elevation of number of erythrocytes
Increase in content of plasma proteins
Reduction of number of erythrocytes

Shame pain in the lower jaw, swelling of the cheek, temperature of 376°C occurred in the patient who had had dental caries for some years. What changes in the patient’s blood may be observed in this case?
Neutrophilic leukocytosis;
Leucopoenia;
Monocytosis;
Anemia;
Eosinophilia.

A patient aged 43 has stomatitis, glossitis, the tongue is crimson colour, smooth Blood analysisrevealed: Hb 100 g/l; erythrocytes 2.3xl19/l; color index 1.30. What is the patient’s state due to?
Vitamin B12 deficiency
Erythrocytes haemolysis
Hypoplasia of red bone marrow
Impairment of porphyrin synthesis
Iron deficiency

A patient with atrophic gastritis has Vitamin Вы deficiency. What variant of nuclear shift of differential count is most typical for Biz hypovitaminosis?
To the right
Hyper regenerative to the left
Degenerative to the left.
Regenerative and degenerative to the left.
E Regenerative to the left

A 32-years-old male patient has hemorrhage after injury of vessel that connected to formation of friablethrombi. What coagulation factor deficiency has led to this disorder?
XIII (fibrin stabilizing factor)
II (prothrombin)
III (thromboplastin)
VII (proconvertin)
XII (Hageman's factor)

A man, who has been to Arctic fora long time, has hemorrhage from gums, his teeth sway and pull out.What is the initial mechanism in scurvy development?
Impairment of collagen synthesis
Infringement of elastin synthesis
Affection of alveolar process
Fragility of capillaries
Insufficient tightness of round ligament of tooth

Preliminary exfoliation of placenta and hemorrhagic shock develop in a pregnant woman during thedelivery. While taking woman's blood for analysis it coagulates in syringe. The acute DIC syndrome isdiagnosed in this woman. What pathogenic mechanism appears to be initial in disorder of hemostasis in this case?
Activation of tissue thromboplastin derived from destroyed tissues
Activation of sympathetic-adrenal system
Elevation of platelet aggregation
Cascade activation of plasma coagulation factors
Oppression of aticoagulative system of blood

It was found out before operating on that the patient has bleeding time increased up to 9 min. What bloodcells deficiency do these changes result from?
Platelets
Monocytes
Erythrocytes
Lymphocytes
Leukocytes

Breathlessuess, acute pain in the chest, cyanosis, and enlargement of neck veins rapidly develop in a patientsuffered from thrombophlebitis. What is the most possible disorder of blood circulation in this patient?
Pulmonary thromboembolism
Cerebral thromboembolism
Coronary thromboembolism
Mesenterial thromboembolism
Portal thromboembolism

Numerous subcutaneous hemorrhages appear in a patient suffered from hepatic cirrhosis. What is a possiblereason for this?
Reduction in synthesis of factor 11 (prothrombin)
Excessive decay of vitamin C
Disorder of vitamin K synthesis
Hypocalemia
Deficiency of factor 111 (thromboplastin) in blood plasma

Hemorrhagic syndrome with disorders of the third stage of blood coagulation develops in a patient afier shewas operated on uterus. What is the most probable mechanism of hemostasis disorder in this case?
Activation of fibrinolysis
Qualitative abnormalities of fibrinogen
Deficit of fibrin stabilizing factor
Decrease in ptothrombin synthesis
Decrease in fibrinogen synthesis

Hemorrhagic diathesis has developed in a patient, with streptococcus infection. What is the reason forhemorrhage development?
Enhanced fibrinolysis
Elevation of heparin content in the blood
Vitamin A deficiency
Increase in callicrein content in blood
Vitamin C deficit

Point hemorrhages appear on a forearm of a patient after putting a tourniquet on a patient's arm. Whatfunctions of blood cells do these changes connect to?
Platelets

Neutrophils
Erythrocytes
Basophils
Macrophages

A teeth was pulled out from the patient with chronic hepatitis. Bleeding, which developed after that, couldnot be seized for 2 hours. Performed blood analysis establishes increase in content of several coagulationfactors. What kind of liemoStasis is damaged in this case?
Coagulation
Platelet-vascular
Vascular stasis
Platelet reaction
Vascular reaction

Numerous hemorrhages and bruises were found out on the patient's body. At eiaminalion of this patient:his bleeding time by Duke is 25 min, his number of platelets is 25x109/L. What disease are these symptomscharacteristic for?
Hereditary defect of platelet formation
Hemophilia B
Von Willebrand's disease
Vitamin C deficiency
Hemophilia A

A 65-years-old male patient suffered from atherosclerosis was admitted to the surgical department becauseof diffuse purulent peritonitis. When the patient was operated on thrombosis of mesenterial vessels wasdiagnosed in him. What is the most possible reason for peritonitis development?
lschemic infarction
Hemorrhagic infarction
Agiospastic ischemia
Stasis
Compressive ischemia

Hemorrhagic syndrome connected to disorders of the third phase of coagulation developed in a patient afterhe was operated on pancreas. What is the possiblemechanism of development of hemostasis disorder?
Activation of fibrinolysis
Elevation in content of heparin in patient's blood
Reduction in fibrinogen synthesis
Deficit of fibrin stabilizing factor
Reduction in prothrombin synthesis

Sharp pain and edema of tissues develop in a patient with thrombosis of veins of his right calf. What is thepossible consequence of thrombosis?
Circulatory hypoxia
Hypertrophy of tissues
Enhancement of drainage of tissues
lntensification of metabolism
Enhancement of functional activity of tissues

Thrombosis of coronary arteries occurs in a patient with atherosclerosis of cordial vessels. What is thereason for formation of thromb?
Heparin deficiency
Thrombocytopenia
Acceleration of blood flow
Activation of fibrinolysis
Vitamin K deficiency

An elderly patient was admitted to the hospital with thrombosis of veins of his calf. What is the reason forthrombosis development?
Injury of vessel wall
Decrease in prothrombin concentration in blood
Increase in heparin concentration in blood
Slowing-down of blood flow
Activation of plasmin

When examining a patient increased blood coagulation (thrombophilia) was found out in him. What reasonsfavor such state development?
Deficit of inhibitors of proteolytic enzymes

Intensification of prostacyclin synthesis in vessel wall
Low concentration of thrombin in blood
High concentration of heparin in blood
High concentration of adrenalin in blood

Thrombocytopenia was found out in blood of a patient with Werlgoff's disease. Why the pathology ofplatelets leads to hemorrhage?
Decrease in thromboplastin formation
Decrease in concentration of prothrombin in blood
Decrease in concentration of heparin in blood
Activation of fibrinolytic system
Decrease in concentration of fibrinogen in blood

Hemophilia A was diagnosed in a patient with hemorrhagic syndrome. What is the reason for this diseasedevelopment?
Absence of factor VIII
Absence of Stewart's factor (factor X)
Absence of Christmas's factor (factor IX)
Absence of Rosenthal's factor (factor XI)
Low concentration of Hageman's factor (factor XII) in blood

A patient was admitted to the hospital with abundant hemorrhoid bleeding. This patient has been sufferingfrom hepatic cirrhosis for a long time. What is the reason for hemorrhage development under hepaticcirrhosis?
Prothrombin deficiency
Activation of fibrinolysis
Plasmin deficiency
Low concentration of thrombostenin in blood
Excess of heparin

While climbing upstairs on the 5th floor a patient has got an increased arterial pressure. The cause is theincrease of:
Minute volume of the blood
The number of functioning capillaries
Content of ions in blood plasma
Viscosity of the blood
Circulating volume of the blood

On analysis ECG it was determined: sinus rhythm, correct, interval RR is 0.58 see, location and duration ofother intervals, waves and segments are not changed. Call the type of arrhythmia:
Sinus tachycardia
Sinus bradycardia
Indioventricular rhythm
Sinus arrhythmia
Ci1iary arrhythmia

The fimctioning of certain structures is stopped on the isolated heart by means of cooling. What structure iscooled if due to this the contractions stopped at first, but then they began with a rate 2 times slower thaninitial one?
Sinoatrial node
Purkinje's fibres
Limbs of His" bundle
Atrioventricular node
His' bundle

A patient with chronic glomerulonephritis has edema, BP is 210/100 mmHg; the rate of heartbeat is 85 perminute; the borders of the heart are dilated. What is the leading mechanism in the development of arterialhypertension?
Activation of renin-angiotensin-aldosterone system
Increase of the activity of sympathetic adrenal system
Hyperfunction of the heart
Increase of circulating volume of the blood
Increase of vasopressin output

The patient's ECG shows that interval RR=1.5 5, heart rate - 40 per min. What is the pacemaker of the heart?
Sinus node
Left limb of His' bundle
His' bundle
Right limb of the His bundle
Atrioventricular node

Pulmonary edema developed in a patient with hypertonic crisis. What is the main factor in the pathogenesis of his state?
Increase of hydrostatic pressure in the capillary of the lungs.
Increase of arterial pressure
Permeability increase of the vessels of pulmonary circulation
Resistibility increase of the lung vessels
Decrease of oncotic pressure of blood plasma.

Redistribution of organ blood supply took place in a young man, aged 20 during the load. What organ did the blood flow increase in most ОГ all?
Skeletal muscles
Brain
Kidneys
Liver
Heart

A patient with renal disease accompanied by parenchyma ischemia has a high arterial pressure. What leading factor is the cause of the increase of AP in this patient?
Excess of angiotensin II
Excess ОГ antidiuretic hormone
Increase ОГ heart output
Increase of sympathetic nervous system tonus
Hypercatecholaminemia

During the operation reflex increased of vagus nerve influence on the heart happened. What may occur in this case?
Cardiac arrest
Increase of atrioventricular node conduction
Increase of myocardium conduction
Intensification of myocardium contractions
Increase of heart rate

Decrease of RR interval was revealed on ECG of a man. What changes in the heart work are observed in this case?
Increase ОГ heart rate
Decrease of heart rate
Increase of force of contractions
Decrease of force contraction
Decrease of force and rate of contractions

Large amount of isoenzymes of creatine k'inase of MV-form was revealed in the blood ОГ the patient with destructive changes in the muscular tissue. What is the most possible diagnosis?
Myocardial infarction
Muscular atrophy A
Muscular dystrophy
Polymyositis
Myopathy

Patient’s attack of tachycardia was stopped by pressing on the eyeballs (Danini-Ashner reflex). In the decrease of the heart rate there is intensification of the influence on the sinoatrial node of:
Vagus nerves
Sympathetic nerves
Autonomic nervous system
Sympathoadrenal system
Catecholamines

Considerable increase of PQ interval was found out on ECG. It means that conduction ОГ stimulation is delayed by:
AV node
Atria
His’ bundle
Purkinje’s fibres
Ventricles

During the attack of heartbeat a patient with thyrotoxicosis has an irregular pulse of different filling, pulse deficiency is, observed. Waves P are absent; small in amplitude, disorderly undulations (P waves), and irregular ventricular complexes ОГ ordinary configuration are noted. What kind of rhythm impairment is observed in a patient?
Ciliary arrhythmia
Sinus tachycardia
Sinoatrial block

Paroxysmal tachycardia
Ventricular extrasystole

At examination of a patient strengthening of a second pulmonic sound, hypertrophy of the right ventricle wall are determined. What changes of hemodynamic take place in pulmonary circulation?
Spasm of resistant vessels in the lungs.
Hyperperfusion of the lungs
Hypoperfusion of the lungs
Manifestation of Hering-Breuer reflex
Development of broncho-alveolar vascular anastomosis

At examination a patient's arterial pressure is 190/100 hg. What factors leads to increase of arterial pressure?
Spasm of resistance vessels
Increase of venous recurrence
toxygenic dilation of cardiac muscle
Aler-Lilestrand reflex
Kitaevs reflex.

Marked frequency of the patients pulse was determined during the examination, what is sinus tachycardia due to?
Increase of speed of slow diastolic depolarisation
Hypothyrosis
Hypokalemia
Tonus increase of vagus nerve
Excess of acetylcholine

Considerably slow pulse was determined in a patient at examination. What is sinus bradycardia due to?
Decrease of speed of slow diastolic depolarisation
Hypercatecholaminemia
Decrease of circulating blood volume
Hyperkalemia
Haemic hypoxia

The rate of spread of pulse wave turned out to be considerably higher in a man aged 70, than in a managed 25. The cause'of this is decrease of:
Elasticity of vascular wall
Arterial pressure
Cardiac output
D. Rate of cardiac contractions
E. Circulation rate

.0n recording ECG of a patient with hyperfunction of the thyroid gland increase of rate of cardiac i contractions was registered. Shortening 'of what ECG element indicates this?
Interval R-R
Interval P-Q
Interval P-T
Segment P-Q
Complex QRS

A man has got an electro trauma. Current went through the cardiac muscle. What dangerous impairment in the work of the heart demanding urgent measures may appear in this situation?
Ventricular fibrillation
Bradycardia
Extrasystole
Atrial fibrillation
Tachycardia

After taking a fatty food a patient feels nausea, flaccidity, later the sing of steathorrhea has appeared, cholesterol in the blood 9,2ml/c. The cause of this state is the deficiency of:
Bile acids.
Chylomicrones.
Triglyceroides.
Fatty acids.
Phopholipids.

A patient aged 45 had the diagnosis ulcer of stomach. On examination of secretory function of the stomach it was determined that the basal secretion was 100mole-hr, acidity of basal secretion - 60 mml/hr. What factors action contributes to the hypersecretion in the stomach?
Gastrine.
Pancreatic polypeptide.
Somatostatin.
Glucagon.
Betaendorphin.

On laboratory examination increased amount of diastase in the urine and also a large amount of undigested fat in stool were revealed in a patient female with complain of circular character pain in epigastric area. What form of gastrointestinal tract pathology are described signs typical for?
Acute pancreatitis.
Inflammation of large intestine.
Acute appendicitis.
Infection gastritis.
Ulcerous disease of the stomach.

A part of patient pancreas was resected. What kinds of product must be limited in his diet?
Fatty and fried meat.
Sour milk product.
Fruits.
Not fatty boiled meat.
Vegetables.

What enzyme deficeiency is the cause of maldigestion of fats in the gastrointestinal tract and increase of neutral fats in the stool?
Pancreatic juice.
Gastric lipase.
Intestinal lipase.
Hepatic lipase.
Enterokinase.

Decrease of synthesis and secretion of trypsin is observed in chronic pancreatitis. The splitting of what substances is broken?
Proteins.
Nucleic acids.
Polysaccharides.
Lipids.
Liposoluble.

In coprologic investigation it is determined that stool is discoloured, there are drops of neutral fat in it. The most possible cause of this is the impairment of?
Entering of bile into the intestine.
Secretion of intestinal juice.
Process of absorption in the intestine.
Acidity of gastric juice.
Secretion of pancreatic juice.

A patient had been taking antibiotics of a wide spectrum of action for a long period of time that caused decrease of appetite, nausea, and diarrhea with saprogenic smell. What is the side effect of treatment?
Dysbacteriosis.
Hepatotoxic action.
Allergic reaction.
Nephrotoxic action.
Direct irritative action.

On examination of a patient suffering from acute pancreatitis increased amount of chylomicrons was determined in the blood. What enzyme activity is sharply decreased in this pathology?
Lipoproteinelipase
Pancreatic lipase
Pancreatic phospholipase
Tissue trigliseride lipase
Tissue digliseride lipase

The analysis of gastric juice of an elderly man who complained of unmotivated weakness, sickness, absence of appetite showed achylia, achlorhydrea, and presence of lactic acids and coagulated blood, decreased of pepsin secretion. What disease causes such clinical-laboratory symptoms?

Cancer of the stomach
Chronic gastritis
Chronic pancreatitis
Cavitary Maldigestion
Acute gastritias

A man with chronic hepatitis has dyspeptic disorders: decrease of appetite, nausea, unstable stool, and steathorrhea. What is the mechanism of dyspeptic disorders in hepatic pathology?
Hypocholia
Intoxication
Hypoglycemia
Cholalemia
Hyperbilirubinemia

Spasmodic pains in the abdomen and repeated diarrhea with mucus appeared in a healthy person 3-5 hours later after taking meals. This was preceded by nausea and momentaneous vomiting, general weakness, loss appetite. What is the most possible cause of the desired symptoms?
Food intoxication
Chronic pancreatitis
Enterocolitis
Hyperacid state of the stomach
Chronic gastritis

A man who work at a storage battery plans complains of constant felling of weight and periodical spasmodic pains in the abdomen, constant retention of stool(not more often than one time per three day). This is accompanied by frequent headaches, flaccidity absence of appetite, and bad taste in the mouth. What are the causes of these disorders?
Spastic lead colic with constipation
Hyper acid state of the stomach
Hypoacid state of the stomach
Chronic pancreatitis
Parietal maldigestion

Due to chronic gastritis a man has impaired structured of the mucous membrane, decreased indices of acid formation function of the stomach. The most essential negative result of this will be the impairment of:
Protein digestion
Excretion of secretum
Pancreatic juice secretion
Secretory function of small intestine
Evacuation of chyme. Into duodenum

On laboratory examination increased amount of diastase in the urine and also a large amount of undigested fat in stool were revealed in a patient with complains of circular character pains in epigastric area. What form of gastrointestinal tract pathology are the described signs typical for?
Acute pancreatitis
Inflammation of the large intestine
Acute appendicitis
Infectious hepatitis
Ulcerous disease of the stomach

A patient aged 35 with ulcerous disease had a rejection of antral portion of the stomch. What gastrointes al or once secretion will be impaired due to operation ?
Gastrin
Secretin
Neurotensin
Histamine
Cholecystokinin

A patient aged 57 was admitted to a gastrointestinal department with suspicious on Zolliger-Ellison syndrome, which was proved by sharp increase of gas level in the blood serum. What impairment of secretory gas e function is the most possible?
Hyperacid hypersecretion
Hypercid hyposecretion
Hyperacid hypersecretion
Achylia
Hypoacid hyposecretion

A patient with signs of encephalopathy was hospitalised in neurological in- patients department and corelation between increase of encephalopathy and substances passing from intestine into systemic blood circulation was determined. What compounds formed in the intestine may cause endotoxemia?
Indole
Acetoacetat
Biotin
Ornitin
Buthirat

A patient age 37 was admitted into a surgical department with the signs of acute pancreatitis: vomiting, diarrhea, bradycardia. hypotension wearness, dehydration of the organism. What preparation must be used first of all?
Contrical
Ephedrine
No-spa
Pephenazine
Platyphyllin

A patient has a stone in the common bile duct, w ch has stopped passing bile into the intestines. The impairment of what digestive process is observed in this case?
Digestion of fats
Digestion of carbohydrates
Absorbtion of carbohydrates
Absorption of proteins
Digestion of proteins

On fibroscopy of the stomach ulcer was revealed in antrum portion which was associated with dissemination of nucosa by helicobacter pylori. The role of this agent in the formation of ulcer results in:
Damage of mucous barrier
Inhibition of mucosa regeneration
Impairment of microcirculation in mucous
Stimulation of HCL secretion
Stimulation of pepsin secretion

A patient with ulcer of stomach has impairment of equilibrium between the factors of aggression and defense. What factor contributes to the development of gastric ulcer?
Helicobacter pylori
Mucin
Bicarbonate
Prostaglandin E2
Prostacyclin

After resection of duodenum a patient has developed a syndrome of duodenal in sufficiency due to the impairment of its endocrine function with signs of cell insufficiency of APUD system. What hormone is produced by A-cells of s portion of intestine?
Glucagon
Histamine
Insulin
Serotonin
Secretin

A patient complains of nausea, which often ends with vomiting. These dyspeptic phenomena become mote laborious with time. What stomach function is infringed in this patient?
Evacuation
Motility
Reservoir
Incretory
Secretory

A patient aged 42 was admitted to the hospital with gastric hemorrhage (ulcerous disease was excluded by a patient). Ulcer and hyperplasia of gastric mucose were revealed. What investigation is it necessary to carry out to confirm the diagnosis of Zollinger-Ellison syndrome in this patient?
Definition of gastrin level in the blood
Tomography of pancreas
Definition of secretin level in the blood
Definition of activity level of pancreatic enzymes

Investigation of activity level of pancreatic secretion

The amount of protein in the blood was examined in a patient after resection of sizeable part of small intestinc. What change of in amount may be expected in this patient?
Hypoproteinemia
Hyperproteinemia
Paraproteinemia
Flypergammaglobulinemia
Pysproteincmia

Ulcerous disease of the stomach is revealed in a woman aged 52, who has been ill with contact dermatitis On examination it is determined that the patient had been taking corticosteroid preparations for a long period of time, but acidity of gastric juice was increased. What mechanism caused the increase of gastric secretion?
Decrease of prostaglandin content
Increase of secretin secretion
Gastrin hyposecretion
crease of histamine content
Increase of gastrin excretion

A patient complains of vomiting, eructation, pain in epigastric area, constipation, and emaciation. On examination a basal secretion of HCL is 6mnl/gr: maximal one is 60mml/gr. What state has acid-forming function of this patient?
Hyperacid
Hypoacid
Anacid
Hypersecretory
Normacid

A patient aged 42 complains of pains in epigastric area, vomiting; vomitory masses have color of "coffee grounds", melena. In anamnesis there is ulcerous disease of the stomach. On examination: skin is pale, heart rate-110 beats per minute: AP-90/50mm.hg. Blood analyses: erythrocytes-2.8 x 10 /1 leucocytes-8x10/1 hemoglobin-90 gr/I. What is the possible complication that developed in the patient?
Hemorrhage
Penetration
Perforation
Cancerous degeneration
Pylorostenosis

The investigation of pancreatic function was carried out in experimental animal by radioisotopic method. The percentage of excreted with stool 1^{131}- albumin is 53%. This is the evidence of:
Inhibition of exocrine function
Increase of exocrine function
Increase of incretory function
Inhibition of incretory function
Normal function

Malabsorption syndrome is:
Syndrome of intestinal malabsorption
Syndrome of membranous maldigestion
Syndrome of gastric malabsorption
Syndrome of malabsorption in small intestine
Malabsorption of proteins

A patient complains of dyspeptic disorders, melena, hemorrhoidal bleedings. While examination of the patient enlargement of veins at the anterior surface of abdomen and increased abdomen dimensions were revealed. What pathology of GIT may manifest by such symptoms?
Portal hypertension
Colitis
Intestinal autointoxication
Peptic ulcer
Enteritis

A 67-year-old woman, who has cholecystitis for a long time, suddenly developed sharp pain in the upper part of abdomen, nausea, and vomiting after food intake. Acute pancreatitis was diagnosed in this patient. What is the main link in pathogenesis of this disease?
Preliminary activation of pancreatic enzymes
Decrease in enzyme levels in pancreatic juice

Intensification of enzyme activation in duodenum
Reduction of pancreatic polypeptide secretion
Increased level of cholecystokinin

A patient has increased gastric secretion in response to both mechanical and chemical stimuli. He has high acidity of gastric juice with pH equals 2.0 on an empty stomach. After the breakfast pH restores to normal in 12 minutes and is continuously dropping during following 2 hours. What type of stomach secretion is being observed in this patient?
Excitable
Inhibited
Inert
Asthenic
Normal

Flabby contraction of gall bladder was revealed in a woman aged 55 after introducing some of vegetable oil into duodenum. What hormone insufficiency with such state?
Cholecystokinin
Gastrin
Enterogastrone
VIP
Pancreozymin

A patient aged 25 has a diagnosis of chronic hepatitis. A patient has lost 10 kg of his body weight for 2 months. Objectively: the skin is dry, desquamative, and pale with yellowish color, small punctate hemorrhages on the skin, stomatorrhagia. The impairment of what hepatic function do petechial hemorrhage and stomatorrhagia prove?
Albumin synthetic
Glycogen synthetic
Pigmentary
Detoxifying
Depositing

On examination bile congestion in the liver and cholelithiasis were revealed in a patient. Point out the main component of cholelithiasis in this state:
Cholesterol
Calcium bilirubinate
Triglycerides
Protein
Mineral salts

Residual nitrogen and urea were determined in the patient’s blood analysis. The amount of urea in the residual nitrogen is considerably reduced. The disease of what organ is characterized by this analysis?
Liver
Intestine
Kidneys
Stomach
Heart

A patient complains of general weakness, boring pain in the abdomen, bad appetite, suspicion on jaundice. Blood serum contains 77.3 micromol/L of total bilirubin and 70.76 micromol/L of conjugative bilirubin. What is the most possible type of jaundice?
Mechanical jaundice
Acute hepatitis
Hepatic cirrhosis
Parenchymatous jaundice
Hemolytic jaundice

In 70’s the scientists determined that the cause of severe jaundice in newborns was the impairment of connection of bilirubin in hepatocytes. What substance is used for the formation of conjugate?
Glucuronic acid
Pyruvic acid
Uric acid
Sulfuric acid
Lactic acid

A man aged 38 with icteric skin has anemia, enlarged spleen, hyperbilirubinemia, urobilinuria, hypercholic stool. What condition are these changes typical for?
Pre-hepatic jaundice
Post-hepatic jaundice

Hepatocellular jaundice
Gilbert syndrome
Syndrome of hepatic insufficiency

It’s determined that a patient with jaundice has increased amount of total bilirubin instead of indirect one (free) in blood plasma, high content of stercobilin in stool and urine, the level of direct (connected) bilirubin in blood plasma is normal. What kind of jaundice is it?
Hemolytic
Mechanical
Jaundice of the newborn (icterus neonatorum)
Parenchymatous (hepatocellular)
Gilbert’s disease

In inflammatory process colloidal properties of bile are impaired in gall bladder and this results in the formation of gall stones. What substance crystallization is the main cause of the formation?
Cholesterol
Urate
Chloride
Oxalate
Phosphate

After an accident a completely crashed man’s liver was removed. What disorders do of hepatic absence may cause death during the first hours after operation?
Hypoglycemia
Intoxication
Fall of BP
Sharp ascites
Hemophilia and hemorrhage

Isoosmotic hyperhydration has developed in a patient with hepatocirrhosis. What is the leading mechanism of dyshidria development?
Secondary aldosteronism
Cardio-vascular insufficiency
Growth of wall capillary permeability
Rushyer-Petrovsky reflex
Hypoproteinemia

On the background of pain in the right hypochondrium and yellowness ‘a patient with hepatic cirrhosis has constant dyspeptic disorders in a kind of bitter taste in the mouth, feeling of heaviness in epigastric area, nausea, unstable stool, steatorrhea. What is the main cause of the described disorders?
Hypocholia and intoxication
Hypoglycemia
Increase of stercobilin
Hyperbilirubinemia
Hypoproteinemia

In a severe course of viral hepatitis, a patient has developed adynamia, sleepiness at day time and insomnia at night, inadequate behavior (delirious ideas). There is fetor hepaticus, Kussmaul’s respiration. What kind of metabolism impairment causes these symptoms?
Nitrogenous metabolism
Carbohydrate metabolism and hypoglycemia
Water and salt metabolism and hyperhydration
Fat metabolism
Pigmental metabolism and hyperbilirubinemia

There is increase of indole amount and decrease of indican 1 in the patient’s urine. This indicate the impairment of
Detoxication function of liver
Filtering function of kidneys
Reabsorptive function of kidney
Albumin synthetic function of liver
Secretory function of pancreas

Increase of direct and indirect bilirubin is determined in blood of a patient with marked yellowness of sclerae and skin. There is great amount of bilirubin and urobilin in the urine, traces of stercobilin, decrease of stercobilin in stool. Define pathogenic type of jaundice in a patient.
Parenchymatous

Hemolytic
Mechanical
By-pass
Transmissible

A patient admitted to the hospital has clearly marked widened subcutaneous veins in the area of umbilicus ("the head of medusa"). Which of the large venous vessels has the impaired passage?
V. porta
V. renalis
V. iliaca inferior
V. mesenterica superior
V. mesenterica inferior

In coprologic investigation it is determined that stool is colorless; there are drops of neutral fat in it. The most possible case of this is impairment of:
Entering the bile into intestine
Secretion of intestine juice
Acidity of gastric juice
Processes of absorption in the intestine
Secretion of pancreatic juice

A patient had nausea and malaise after taking fatty foodstuffs. Sings of steatorrhea developed in this patient some time later. Content of cholesterol in patient's blood is 9.2 mmol/L. This condition results from deficiency of:
Bile acids
Chylomicrons
Triglycerides
Phospholipids
Lipase

Low level of albumins and fibrinogen were revealed in the patient's blood. The decreased activity of what hepatocyte organelles cause this phenomenon?
Granular endoplasmic network
Agranular endoplasmic network
Mitochondria
Golgi complex
Lysosomes.

A patient was admitted into a clinic with signs of acute alcohol poisoning. What changes of carbohydrate metabolism are typical for this condition?
The rate of gluconeogenesis decreases in the liver.
Gluconeogenesis increases in the liver
Glycogen decomposition increases in the liver
Aerobic decomposition of glucose increases in the muscles
Anaerobic decomposition of glucose predominates in the muscles.

A man aged 54 was admitted into the clinic with complaints of pains in the right hypochondrium vomiting with blood. Objectively: enlargement of hepatic size, varicose of esophagus and stomach, bleeding from them. The functional disorder of what vessel took place?
Vena porta
Vena hepatica
Vena cave superior
Aorta abdominalis
Vena cava inferior

The development of acute pancreatitis in a patient is accompanied by the impairment of permeability of common bile duct. What pathologic process may this result in?
Mechanical jaundice
Hemolytic jaundice
Parenchymatous jaundice
Hepatic coma
Portal hypertension.

Which of the factors plays the leading role in the development of encephalopathy in hepatic insufficiency?
Increase of concentration of toxic substances in the blood
Hyperaldosteronism
Hyperbilirubinemia

Hypofibrinogenemia
Hypoproteinemia

A patient has a diagnosis of ascites. There are no edemas in the other parts of the body. There are large vessels of cyanotic color on the abdomen. What pathology has this patient?
Portal hypertension
Essential hypertension
Hypertension of pulmonary circulation
Chronic circulatory insufficiency
Hepatic hypertension

Arterial hypertension may develop in a case of hepatic insufficiency. Which of these factors causes the increase of arterial pressure in such cases?
Aldosterone
Adrenaline
Renin
Noradrenalin
Angiotensin II

A patient aged 25 is ill with jaundice, his skin has got yellow and green color, there's skin itch, hypocholic stool throbbing gall bladder. What is the origin of jaundice?
Obturative genesis
Serum hepatitis
Hepatic cirrhosis
Leptospirosis
Post-transfusion

A patient complains of general weakness, breathlessness. Decrease of BP, ascites, widening of superficial veins of anterior abdominal wall, splenomegaly were established in this patient. What impairment of hemodynamic has this patient?
Portal hypertension syndrome
Left ventricular failure
Right ventricular failure
Collapse
Arterial hypotension.

A patient with jaundice complains of erythrism, headache, and insomnia. Objectively: pulse-54 beats/min. BP- 90/60 mmHg. Coagulation of blood decreases. There are traces scratching on skin. The action of what component causes these symptoms?
Bile acid
Bilirubin
Cholesterol
Bile pigment
Fatty acid

A patient was admitted to the hospital with complaints of dyspeptic disorders, melena, hemorrhoidal bleeding. Extensions of the vessels on the anterior abdominal wall in combination with the enlargement of size of the abdomen were revealed on examination of this patient. What pathology of gastrointestinal tract shows these symptoms?
Portal hypertension
Ulcerous disease
Intestinal autointoxication
Colitis
Enteritis.

Yellow color of the skin and the sclera, dark urine appeared in a patient after fungus poisoning. What pigment causes the color of urine in the patient with hemolytic jaundice?
Stercobilin
Biliverdin
Verdoglobin
Unconjugated bilirubin
Monoglucoronide bilirubin

A female patient with chronic hepatitis complains of increase sensitivity to barbiturates which she used previously without any symptoms of intoxication. The disorder of what hepatic jaundice is responsible for this state?
Metabolic
Bile formation
Hemodynamic
Hemopoietic

Phagocytotic

Marked jaundice appeared in a patient 3 months later after the operation on his upper jaw. What pathological process may this patient have?
Hepatic jaundice
Pre-hepatic jaundice
Hereditary hemolytic jaundice
Post-hepatic jaundice
Cholecystitis

A female patient aged 45 was admitted to a hospital with complains of sudden pain in the abdominal cavity, increase of temperature, and leukocytosis. Which of factors caused these changes in the woman's condition?
Gall stones
Bacteria
Mechanical energy
Acids
Viruses

In a 38-year-old patient, who endued viral hepatitis C and is abusing alcohol, symptoms of hepatic cirrhosis with ascites and edemas on lower extremities developed. What changes in blood composition underlies edema development?
Hypoalbuminemia
Hypoglycemia
Hypoglobulinemia
Hypokalemia
Hypocholesterolemia

A patient has severe nephropathy with a massive edematous syndrome. which complicated bronchiectatic diseases. Laboratory investigations show massive proteinuria, cylindruria considerable decrease of protein content in the blood serum, hyperlipidemia, hypokalemia and other deviations. What is the main link in the pathogenesis of the patient's edemas
Decrease of oncotic blood pressure.
Increase of extracellular fluid pressure
Increase of hydrostatic blood pressure
Blockade of lymph drainage
Hyperpermeability of microvessels

A patient with renal insufficiency has a disorder of hemopoie synthesis produced in the kidneys What formed blood elements development is impaired?
Erythrocytes
Granulocytes
Thrombocytes
B lymphocytes
T-lymphocytes

The narrowing of afferent glomerular renal arteriole caused the decrease of urination. The cause of this s a decrease of:
Effective filtration pressure
Reabsorption of glucose
Reabsorption of ions
Reabsorption of urea
Reabsorption of water

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B-cells of Lanhergans islets
Nephron glomeruli
Nuclei of hypothalamus
Adrenal cortex

A patient age 48 with fibro-cavemous tuberculosis complains of general weakness decrease of diurnal urination, edemas the ltrauma and extremities, increase of AP up to 180/90 mm. Hg Urinalysis shows increase of protein ya e and granular cylinder erythrocytes. A month later he died from renal insufficiency. Enlargement of the heart and large "fatty kidneys were revealed at autopsy (weight of kidneys is 240.0 gm -260.0 gin). What disease was fibro-cavernous tuberculosis of the lungs complicated by?
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Glomerulonephritis
Nephrotic syndrome
Pyelonephritis
Nephrosclerosis

A patient with chronic glomerulonephritis has edemas, AP-210/100 mmHg, and the rate of heart beats- 85 per minute. The borders of the heart are dilated. What is the leading mechanism in the development of arterial hypertension?
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Glonnerular filtration
Tubular secretion
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Increase in tubular secretion
Increase in tubular excretion

Decrease in tubular reabsorption
Extrarenal disorders

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Less of erythrocytes in urine
Increased destruction of normal erythrocytes
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Secondary aldosteronism
Hematuria
Poteinemia

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A patient with acute renal insufficiency developed anuria (diurnal ation 50 ml). Which of the bellow-mentioned mechanisms is the main one in its development?
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Increase of water reabsorption
Increase of sodium reabsorption
Difficulty of urine outflow

A patient with chronic glomerulonephritis as vegetation of collagenic fibers in interstitium near tubules in which reabsorption of sodium ions decreases. What underlies these changes in reabsorption of sodium ions io tubules?
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The damage of proximal portion of nephron was held in a ratient in 24 hours later after the poisoning by corrosive s What electrolyte reabsorption is impaired in this pathology?
lons of potassium
lons of chloride
Ions of sodium
Ions of calcium
lons of magnesium

A patient aged 35 complains of pain in the lumbar area, edema under eyes, and increased fatigability in usual physical loads. Protein was revealed in patient's urine (0.99gr/I). Patient's BP is -160/I10 mmHg What pathology has the patient?
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Pyelitis
Cystitis
Acute renal failure
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What pathological process is non-selective, massive proteinuria is characteristic for?
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Urethritis
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What origin or protein is the most possible in selective proteinuria with intensity 12 grday?
Suprarenal
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What pathological process is characterized by combination of massive proteinuria (25gr/day) with generalized edema?
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A man of aged 72 is ill with chronic glomerulonephritis. On examination following was determined: absence of appetite, vomiting, diarrhea, skin itching, anemia, the content of residual nitrogen in the blood is 45mm/l. The indicated signs are caused by:
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Increase of glomerular membrane permeability
Autoimmune damage of nephron function
Renal ischemia
Disturbance of concentrating mechanism

A patient of age 32 with acute glomerulonephritis, who did not follow regime of NaCl and water limitation, suddenly has lost his consciousness and convulsions appeared in him. His BP is 220/120 mmHg, he has mydriatic pupils and bradycardia. What complication has appeared in this patient?
Eclampsia
Acute heart failure
Hypertensive crisis
Renal coma
Epilepsy

A patient has severe nephropathy with a massive edematous syndrome. which complicated bronchiectatic diseases. Laboratory investigations show massive proteinuria, cylindruria considerable decrease of protein content in the blood serum, hyperlipidemia, hypokalemia and other deviations. What is the main link in the pathogenesis of the patient's edemas
Decrease of oncotic blood pressure.
Increase of extracellular fluid pressure
Increase of hydrostatic blood pressure
Blockade of lymph drainage
Hyperpermeability of microvessels

A patient with renal insufficiency has a disorder of hemopoie synthesis produced in the kidneys What formed blood elements development is impaired?
Erythrocytes
Granulocytes
Thrombocytes
B lymphocytes
T-lymphocytes

The narrowing of afferent glomerular renal arteriole caused the decrease of urination. The cause of this s a decrease of:
Effective filtration pressure

Reabsorption of glucose
Reabsorption of ions
Reabsorption of urea
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Epilepsy

On the diagnosis of myocardial infarction the main role belongs to enzymodiagnosis. The definition of content level in the blood of what enzyme is the most important during the first 2-4 hours after infarction?
Creatin phosphokinase
Aldolase
Lipoprotein lipase
Alanine aminotranspherase
Acetylcholinesterase

One of the most dangerous moments in pathogenesis of myocardial necrosis is the further increase of the zones of necrosis, dystrophy and ischemia. The important role in this belongs to the increase of the use of the oxygen by myocardium. What substance contributes to this process?
Catecholamine
Chlorine ion
Cholesterol
Acetylcholine
Adenosine

During the examination of blood for activity of AsAT and AlAT in the patient who complained of pain in the chest and in upper part of the abdomen, the following results were received: activity of AsAT 2 times higher than AlAT activity. What disease docs the patient have?
Myocardial infarction
Acute infectious hepatitis
Acute pancreatitis
Chronic hepatitis
Cirrhosis of the liver

Clinical signs of developing pulmonary edema appeared in a patient with cardiac insufficiency of left ventricular type. Which of the pointed pathogenic mechanism is the primary in such pathology?
Congestive
Hydrodynamic
Colloid-osmotic
Lymphogenous
Membranogenous

A patient has cyanosis, increase of the liver, edema of the lower extremities due to the right ventricular insufficiency. What is the cause of the development of right ventricular failure?
Hypotension of pulmonary circulation
Cardiogenic cirrhosis of the liver.
Functional shunting in lungs
Hypercatecholaminemia
Increase of venous pressure

A woman, aged 25. complains of constant pain in the heart area, breathlessness on movement, and general malaise. She has pale and cold skin, acrocyanosis. Her pulse is 96/m in and her BP is 105/70 mmHg. Heart »border in her shifted 2 cm left. The first sound is weakened over the apex of heart; there is systolic murmur over the apex. Diagnosis is insufficiency of the mitral valve of the heart. What is the cause of the blood circulation failure?
Myocardial overload by the increased blood volume
Myocardial overload by the increased of resistance of blood outflow
Myocardial failure
Volume decreased of circulating blood
Volume increased of v vascular bed

A patient with acute myocardial infarction was being given 1500ml of different solutions intravenously during 8 hours, oxygen intranasally. Death occurs due to pulmonary edema. What was the cause of the pulmonary edema?
Overload of the left ventricle by the volume
Decrease of oncotic pressure due to hemodilution
Allergic reaction
Neurogenic reaction
Oxygen inhalation

Sharp marked pains in the substernal area that radiate to the left arm cannot be controled by nitro-glycerine for 30 minutes. What changes developed in the patient’s hearts?
Myocardial ischemia

Pathological myocardial hypertrophy
Sharp increase of coronary blood flow'
Mitral incompetence
Inflammation of pericardium

The activity of what enzymes is it necessary to determine in pathology of cardiac muscle with diagnostic and prognostic aim?
Creatin kinase, transaminase, lactate dehydrogenase
Arginase, peptidase, phosphatase
Decarboxylase, decanidase. lactate dehydrogenase
Lysozyme, citratc synthatasc, succinate dehydrogenase
Neuronminasc, aldolase, hcxakinasc.

A severe stress was caused in an experimental animal. Necrotic injuries of myocardium developed in this stage. What is the main cause in the pathogenesis of these injuries?
Insufficiency of coronary circulation
Increase of calcium content in cardiomyocytes
Decrease of adenosine triphosphoric acid synthesis in mitochondria
Changes in the work of Na'-K‘ pump
Decrease of adenosine triphosphoric acid activity of myosin

A patient male had a chronic disease of kidneys for 12 years. AP - 200/130mmllg Pulse 75 beats per min. The main factor that causes the increase of pressure in this case is the increase of:
Systemic peripheral resistance
Minute volume of the heart
Heart rate
Circulating volume of the blood
Venous recurrence.

A patient with mitral failure has an enlargement of the liver, edema of lower limbs. What is the leading mechanism of the development of cardiac edema?
Participation of renin-angiotensin-aldosteron system
Increase of venous recurrence
Increase of tissue drainage
Decrease of oncotic pressure
Decrease of transudation.

A patient with myocardial infarction has a mark paleness of skin, oliguria, AP 100/90 mm Hg, and pulse 100 bcats/min. What compensative mechanism maintains relative high level of AP?
Centralization of blood circulation
Hypokalemia
Hypoperfusion of the lungs
Increase of the level of vasodilators in blood
Secondary aldosteronism

In cardiac pathology homeometric mechanism of compensation in the work of the left ventricle takes place in:
Hypertension of systemic circulation.
Stenosis of atrioventricular foramen
Mitral incompetence
Aortic incompétence
Hypertension of pulmonary circulation

In cardiac pathology heterometric mechanism of compensation connected with overloading of left ventricle volume takes place in:
Aortic incompetence
Stenosis of atrioventricular foramen
Stenosis of aortic osteum
Hyper tension of pulmonary circulation
Hypertension of systemic circulation.

Sharp increase ol AsAT activity was determined in the blood serum of a patient 12 hrs later after an acute attack of pain in the substernal area. Which of the pathogenesis is the most possible?
Myocardial infarction
Collagenosis
Diabetes mellitus
Virus hepatitis
Diabetes insipidus

Pressing pain in the heart area with irradiation to the left arm, neck and under the left shoulder blade suddenly appealed in a male patient aged 45. after considerable psycho-emotional exertion. His face became pale and covered with cold perspiration. Nitro glycerin relieved the attack of pain. What process in the patient?
Angina pectoris
Perforation of stomach ulcer
Psychogenetic shock
Myocardial infarction
Insult

In recreation of the arterial hypertension in a dog a thickness in the left ventricle wall increased 1.7 times in a month, but the circulating blood volume was not changed in comparison with the initial data. What stage of myocardial hypertrophy is observed in the animal?
Complete hypertrophy
Initial
Repair
Decompensation
Progressive cardiosclerosis

A patient excretes water from the organism less than lie uses it for 24 hours. What disease may lead to this state?
Cardiac insufficiency
Pancreatitis
Cystitis
Hepatitis
Infectious diseases

A patient who underwent myocardial infarction a month and a half ago had Dressier's syndrome with typical triad: pericarditis, pleurisy, and pneumonia. The cause of its development is:
Sensibilization of the organism by myocardial antigens
Decrease of resistance to infectious agents
Activation of saprophytic micro flora
Intoxication of the organism by necrotic products
Injection of myocardial enzymes in the blood

A patient with rheumatism had incompetence of the left atrioventricular foramen and decompensation of cardiac activity. The characteristic hemodynamic index of this state is:
Decrease of cardiac output.
Slowing down of blood flow
Decrease of arterial pressure
Increase of venous pressure
Widening of microcirculatory bed

Considerable increase of myocardial mass of left ventricle was determined in a patient with hypertension. It was due to:
Increase of cardiomyocyte volume
Increase in amount of cardiomyocytes
Enlargement of connective tissue
Retention of water in myocardium
Fat infiltration myocardium

A patient with aortic atherosclerosis has left ventricular hypertrophy as a compensatory phenomenon. Compensatory role of hypertrophy comes to:
Normalization of load on each cardiomyocyte.
Improvement of delivery of oxygen to myocardium
Activation of synthesis of macroergs in myocardium
Economical use of energy by cardiomyocytes
Increase of stroke volume of the blood

The signs of heart failure appeared in a man aged 56. during carrying out hard work, feelings of air shortage, heart beating, and general weakness. Objectively heart borders are dilated, the heart rate is 92 beats per rain and arterial pressure is 180/110 mm hg. I These signs are due to:
Increase of peripheral resistance.
General hypoxia of an organism
Insufficiency of coronary circulation
Increase of diastolic filling
Neurotrophic disturbances

A patient aged 47 with mitral incompetence has the symptoms of cardiac insufficiency: breathlessness, cyanosis, oedema of lower limbs. Objectively: the borders of the heart are dilated, the heart rate is 104 beats per min, and arterial pressure is 125/85 mm hg. These symptoms are due to:
Increase of diastolic filling.
Increase of peripheral resistance
Autoallergic changes of myocardium
Insufficiency of coronary circulation
Neurotrophic disturbances

Dilution of the heart AP – 155/100 mm hg the heart rate 95 beats per min was revealed in a patient aged 63 with hypertension during the examination. The most effective mechanism which will contribute to the normalization of AP is
Inhibition of catecholamine action.
Inhibition of aldosteron synthesis
Blocking of angiotensin synthesis'
Blocking of vasopressin action .
Administration of salt low diet

After suffered rheumastism a patient had aortic stenosis. Point out what mechanism of compensation takes place in the left ventricle
Homeometric
Heterometric
Systolic
Diastolic
Coronary

After suffered rheumatism a patient had aortic incompetence. Indicate what mechanism of compensation takes place in the left ventricle in this case:
Heterometric.
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Systolic
Diastolic.
Coronary

A patient with acute myocardial infarction, which was caused by thrombosis of coronary arteries was treated with preparation urokinase that led to the development of reperfusion syndrome. Which or the mentioned syndromes is associated with reperfusion?
No-reflow
Dressler's
Chediak-Higashi
Morgagni-Adams-Stokes
Wolff-Parkinson-White

Which of the factors is the most frequent cause of formation of acquired valvular heart disease?
Rheumatism
Septic endocarditis
Syphilis
Atherosclerosis
Mechanical factor

The height of an adult is 100cm, in proportional constitution and normal mental development. What hormone insufficiency do the indicaled signs characterize?
Growth hormone
Antidiuretic
Thyroxin
Mineralocorticoids
Gonadotropic hormone.

Under the influence of harmful ecological factors the normal formation of lysosomes is inhibited in thyrocytes. What stage of hormone production of thyroid gland will be impaired?
Reabsorption of colloids
Synthesis of colloid
Iodinisation of colloid
Synthesis of thyoglobulin
Proteolysis of phagoeynosed colloid from follicles.

Diabetes insipidus appeared in a patient after ab cerebral infarction with impairment of hypothalamus nuclei, What is the cause for increased urinntion in this patient?
Decrease of arterial pressure
Decrease of reabsorption of sodium
Acceleration of glomerular filtration
Decrease of water reabsorption.
Hyperglycemia

What hormone stimulates inclusion of calcium in osteoblasts of bone tissue in tooth?
Calcitonin
Insulin
Thyroxin
Parathormone
Hydrocortisone

A 10-year-old child has a height of 178 cm and weight of 64 kg. What endocrine gland disorder does this connected with?
Pituitary gland
Sexual glands
Adrenal glands
Parathyroid glands
Thyroid gland.

A patient with thyrotoxicosis has hypertherm does this and lass of weight. What kind of impairment connected to?
Ronction of fat synthesis
Lyses of adenosintriposphoric acid
Conjunction amidation and phosphorylation
Reactin of citric acid cycle
Reaction of beta-oxidation of fatty acid.

During an experiment on animals the nervous tracts leading to the crus of hypophysis were broken. That impaired the entrance of the fallowing hormones into the blood.
Adenohypophysis hormone
Hypophysis hormones
Vasopressin and oxytocin
Thyrotropic hormone
Adenocorticotropic hormone

A careless student suddenly meets his dean. What hormone concentration will be increased in student's blood more rapidly?
Thyroliberine
Somatotropin
Hydrocortisone
Corticotropin
Adrenalin

A women aged 44 complains of general malaise, pain in the heart area, and considerable increase of body weight. At examination of this patient following symptoms are revealed: lunar face, hirsutism, BP 165/100 mmHg, height is 164 cm, weight is 103kg, the adipose deposits mainly on the neck, shoulders, abdomen. What is the main pathogenic mechanism of the woman's obesity?
Decrease of thyroid hormone production
Decrease of glycogen production
Increase of glucocorticoid production
Increase of insulin production
Increase of minerelocorticoid production.

A child has a time disturbance of teeth eruption, enamel anomalies and its lips and tongue are enlarged. What hormone deficiency causes these changes?
Parathormone
Thyroxin
Thyrocalcitonin
Insulin
Somatotropin.

At clinical examination of a woman it was determined increase of basal metabolism rate by 40%, increased perspiration, tachycardia, and leanness. What endocrine gland functions are impaired and what direction in?
Sexual glands, hypofunction
Cortical substance of adrenal glands, hyperfunction
Medulla of adrenal glands, hyperfunction

Thyroid gland, hyperfunction
Pancreatic gland, hyperfunction

A young man aged 17 has the signs of retention of asthenic, his secondary sexual characters are is absent in this patient's developed, sex chromatin cells. At the age of 4 he endured epidemic parotitis. What was the cause of hypogonodism?
Deficiency of gonadoliberine
Deficiency of gonadotropin
Cryptorchism
Orchitis
Chromosomal anomalies (XXY)

A patient aged 20 complains of polydipsia and abundant urination (up to 10 liters for of 24 hrs) concentration glucose in his blood is normal; in his glucose is absent. What hormone absence may cause such clinical picture?
Triiodothyronine
Oxytocin
Vasopressin
Insulin
Hydrocortisone

Substances which imitate morphine effects but in CNS may be used for which are analgesia. Indicate them:
Oxytocin
Somatotropin
Beta-endorphin
Vasopressin
Calcitonin

Dilated pupils, dryness of mucous membranes, accelerated heart rate, constipation, and tremor are observed in some people during emotional exertion. What system activation will lead to such changes in the organism?
Somatic nervous system
Pituitary-adrenal system
Sympathetic nervous system
Sympathoadrenal system
Parasympathetic nervous system

In ancient India those people who were suspected in committing crimes were given swallow a handful of dry rice. Criminals couldn't swallow rice due to decreased salivation (oligosalivation) caused by:
Decrease of blood supply of salivary glands
Activation of sympathoadrenal system
Activation of parasympathetic nucleus of glossopharyngeal nerve
Inhibition of sympathoadrenal system
Activation of parasympathetic nucleus of facial nerve

A patient aged 23 complains of headache, changes of his appearance (increase of size of feet, fingers, features of the face), hoarseness of the voice worsening of the memory. The disease has begun 3 years ago without any causes Increase of superciliarry arches, nose, and tongue were found during physical examination of this patient; the blood was normal; the urinalysis is out of changes. What is the cause of such condition?
Insufficiency of aldosterone
Excessive production of corticosteroids
Excessive production of somatotropin
Insufficiency of glucagon
Insufficiency of thyroxin

Adrenalin is used to prolong Novocain action in infiltration anesthesia. What adrenalin action is this effect connected with?
Potentiation of Novocain action at the level of CNS
Inhibition of function of nerve ending and conductors
Dilatation of vessels
Constriction of vessels
Inhibition of tissue esterases

A patient aged 80 complains of increased appetite, thirst, excretion of large amount of urine, and worsening of general condition after taking sweet food. What disease is it?
Diabetes mellitus
Hypercorticoidism
Hyperthyroidism
Hypothyroidism
Diabetes insipidus

Persistent patient with hyperglycemia developed in a of Cushing syndrome influenceof excessive amount of glucocorticoids. Whats is the mechanism of hyperglycemia in this case?
Decrease of hexokinase activation
Activation of glycogenolysis at the liver
Activation of gluconeogenesis
Activation of insulinaze of the liver
Increase of absorption of glucose in intestine

A man aged 38 is in stress state due to industrial conflict. Which of below mentioned hormones participate in starting stress reaction of the organism?
Glucagon
Adrenalin
ACTH
Hydrocortisone
Thyroxin

A woman aged 28 addressed to a doctor a month later after delivery with complaints of decreased breast milk formation. What hormone insufficiency caused this condition?
Prolactin
Insulin
ACTH
Glucagon
GH

While examining a patient a doctor suspected Cushing's syndrome. What substance determination in patient's blood will prove doctor's supposition?
Cortisol
Tocopherol
Adrenalin
Cholesterol
Retinol

The attacks of convulsions appeared in a patient after resection of thyroid gland. What preparation must be administered in this case?
Thyroxin
Somatotropin
Insulin
Prednisolon
Parathyroidin

A dog with endocrine pathology had decreased oxygen usage in the state of rest, decreased body temperature, and decrease of glucose tolerance. What hormone insufficiency may explain the discovered changes?
Adrenocorticotropic hormone
Growth hormone
Thyroxin
Gonadotropin
Insulin

A patient aged 50 complains of thirst, he drink much water, has marked polyuria. His blood glucose 4,8 mmol/L, glucose and acetone bodies are absent in the urine; urine is colourless, its specific gravity 1.002-1.004. What is the cause of polyuria?
Aldosteonism
Insufficiency of ADH
Hypothyrosis
Insulin insufficiency
Thyrotoxicosis

A patient aged 40 was hospitalized with complaints of general malaise, convulsions of upper and lower extremities, his BP 160/100 mm Hg. The results of laboratory examination of him: blood glucose 6.5 mmol/L, calcium 2 mmol/L, phosphates 1 mmol/L, sodium-160 mmol/L. Urination 700 ml for 24 hours. What pathology causes such state?
Rickets
Hyperaldosteronism
Hypoaldosteronism
Hyperparathyroidism
Thyrotoxycosis

Pilosis by male type and increase of muscular mass began appearing in a boy of 5 years old who had developed previously without declination from the age norms. At examination of the patient marked secondary male sexual signs were revealed, but the size of his testes corresponds to his age. What is the cause of precocious puberty?
Androgen producing adrenal tumor
Hormone producing testis tumor
Increase of gonadotropin production
Increase of adrenocorticotropin production
Increase of gonadoliberin production

Why must a patient, who has taken prednisolone for rheumatoid arthritis for a long time, avoid contacts with infectious patients?
of the development of secondary immunodeficiency
Because of risk of exacerbation of arthritis
Because of risk of thromboembolic complications development
Because of the development of lymphopenia
Because of the blockade of interferon formation

Liquidator of an accident at Chernobyl nuclear power plant began complaining of increased excitability, nervousness, heartbeat, decrease of body weight, constant weakness, body tremor, feeling of fever, bad heat endurance. What gland hyperfunction may be the cause of such state?
Thyroid gland
Adenohypophysis
Adrenal gland
Medulla of adrenal gland
Parathyroid gland

Muscular weakness, adynamia, decrease of body temperature, hypoglycemia, developed in a dog after two-sided resection of adrenal gland. What other manifestation of adrenal insufficiency may be noted?
Arterial hypotension
Lymphopenia
Increase of glycogen synthesis
Hypernatremia
Hypokalemia

A woman complains of increased irritability, perspiration, weakness, loss of body weight, tremor of extremities, increased heartbeat rate, and exophthalmia. What metabolic impairment in the organism accompanies this disease?
Increase of basal metabolism
Increase of adenosine triphosphoric acid synthesis
Decrease of organism sensitivity to hypoxia
Weakening of phospholipase activation
Decrease of cholesterol lysis

A patient who suffered from severe thyrotoxicosis had been operated on for strumectomy after that weakness, sensitivity to cold, increase of body weight, paleness and dryness of skin developed. What are the other manifestations of hypothyrosis?
Inhibition of CNS activity
Tachycardia
Increase of basal metabolism
Increase of intestinal peristalsis
Decrease of tolerance to carbohydrates

In case of hypercortisolism – Cushing’s disease – the following changes in the organism take place:
Hyperglycemia
Development of cachexia
Impoverishment of the liver with glycogen
Hypotension
Lymphocytosis

A young man with suspicion on narcotic poisoning was admitted into neurological department. Which of the disorders of external respiration can he expected?
Alveolar hypoventilation
Asphyxia
Alveolar hyperventilation
Kussmal respiration
Biot's Respiration

In pathogenesis of which types of respiration the main link is the fall of excitability of respiratory centre to carbon dioxide due to oxygen

starvation of this centre?
Accelerated and deep breathing
Expiratory dyspnoea
Periodic respiration
Inspiratory dyspnoea
Combined dyspnoea

As a result of casualty the obturation of the lung trachea occurred. Which stage of respiration will be impaired first?
Lung ventilation
Tissue respiration
Exchange of gases in the lungs
Exchange of gases in tissues
transport of oxygen and carbon dioxide

The functional state of respiratory system was examined in a patient w ith emphysema. What is more characteristic for this state?
Increase of tidal volume
Increase of vital volume of the lungs
Increase of inspiratory reserve volume
Decrease of total volume of the lungs
Decrease of inspiratory reserve volume

The syndrome of respiratory insufficiency is often observed in premature born children. What is the main cause of this?
Immaturity of lung alveoli due to deficiency of surfactant
Swallowing of amniotic water
Intrauterine hypercapnia
Imperfection of the nervous regulation of the respiratory act
Intrauterine asphyxia

Paleness of the skin, accclerated superficial respiration is observed in a newborn. Numerous diffused atelectasis aie rev ealed at X-ray examination. What is the most possible cause of this condition?
Surfactant deficiency
Pneumothorax
Hydrothorax
Tuberculosis
Bronchial asthma

A patient who was at a resuscitation department with skull injury suddenly developed convulsions on the background of regaining consciousness, and short arrest of breathing was changed by solitary sighs with calming down character. What types of respiration appeared in the patient?
Gasping respiration
Cheyne-Stokes respiration
Biot s respiration
Kussmaul respiration
Apnoeystic respiration

During meal a child breathe in a seed. What respiratory changes will develop in the child?
At first inspiratory dyspnoea, then expiratory one
First expiratory dyspnoea, then inspiratory one
At first arrest of breathing, then expiratory dyspnoea
Expiratory dyspnoea, then Cheyne-Stokes respiration
Inspiratory dyspnoea, then Biofs respiration

A partial respiratory insufficiency developed in a patient due to a chronic impairment of the organs of respiratory system. What is a characteristic sign of partial respiratory insufficiency?
Hypoxemia without hypercapnia
Hypoxemia and hypercapnia
Hypoxemia and decrease of alveolar ventilation
Decrease of alveolar ventilation and hypercapnia
Hypoxemia and gas acidosis

When developing of pulmonary emphysema in a patient the following is notified:
Increase of functional “dead space”.
Inspiratory dyspnoea
Cardiac insufficiency (left ventricular type)
Decrease of resistance to the airflow in the respiratory tract
Decrease of functional “dead space"

Decrease of the passage at the level of middle and small bronchi is observed in a patient. What process will be the leading in the development of respiratory insufficiency?

Hypoventilation
Disturbance of diffusion
Hyperperfusion
Hypoperfusion
Hyperventilation

In the decrease of the middle and small bronchial passages in a patient the following is observed:
Decrease of pO2 and increase of pCO2 in the alveolar air
Development of gas alkalosis
Decrease of pressure in pulmonary circulation
Developmcnt of inspiratory dyspnoea
Hypocapnia

In obstructive type of respiratory disturbances in a patient it will be determined
Expiratory dyspnoea
Increase in forced vital volume of the lungs
Increase in vital volume of the lungs
Decrease of the tidal volume
Decrease of the total volume of the lungs

In restrictive type of respiratory disturbances in a patient the following is revealed
Decrease of tidal volume of the lungs
Decrease of rate and increase of depth of
respiration
Expiratory dyspnoea
Increase of vital capacity of the lungs
Increase ol tidal volume of the lungs

Gas alkolosis is revealed in llie patient is blood. What process impairment is connected with tin. development?
Hyperventilation
Impairment of diffusion
Hyperperfusion
Hypoventilation
Hypoperfusion

The application of oxygen did not eliminate hypoxemia in a patient with partial respiratory insufficiency. What is the mechanism of respiratory insufficiency? '
Disturbance of diffusion
Hyperperfusion (funclional shunt)
Hypoventilation
Hyperperfusion
(anatomical
shunt)

Hyperventilation

Patient aged 62 was admitted into neurological department due lo cerebral haemorrhage. Grave condition. Incease of depth and rate of respiration and then its decrease and apnoea is observed. What type of respiration appeared in the patient?
Cheyne-Stokes respiration
Apneustic respiration
Kussmaul respiration
Gasping respiration
Biot's respiration

After Typhno's test index decreased to 30% in the patient. The development of what pathological process in the organs of respiratory systems does it indicate?
Obstructive bronchitis
Lobular pneumonia
Pneumothorax
Tuberculous pleurisy
Pneumosclcrosis

A patient has developed athelectasis, which was accompanied by alveolar collapse. What contributes to this?
Surfactant
deficiency
Hyperventilation
Spasm of lung vessels
Arterial
hypertension
Respiratory acidosis

A patient has the pathology of the lung with the disturbance of external respiration and development of hypercapnia and hypoxia. How many times is the ability of CO_2 to diffusion through alveolar-capillary membrane higher than the same one of oxygen?
25
5
10
15
20

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Thyroid gland
Adenohypophys
Adrenal gland
Medulla of adrenal gland

Parathyroid gland

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Hypernatriemia
Lymphopenia
Arterial hypotension
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Decrease of organism sensitivity to hypoxia
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Decrease of cholesterol lysis

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In case of hypercortisolism Cushing's disease the following changes in the organism take place:
Hyperglycemia
Development of cachexia
Impoverishment of the liver with glycogen
Hypotension
Lymphocytosis

A patient was admitted to the hospital with complaints of loss of weight, quick fatigability darkening of skin. His heart sounds are dull. What are the other manifestations of adrenal insufficiency
Lymphopenia
Adynamia.
Arterial hypertension

Increase of minute blood volume
Increased appetite

A patient admitted to the hospital complains of quick fatigability. loss of weight, hyperpigmentation of the skin. Her heart sounds are dull. She has pulse rate 96 beats per minute and BP 90/50 Hg. What metabolic impairments observed are in hypocortisolism?
Increase of glycogen synthesis
Hyperkalemia
Hypernatremia
Hyperhydration
Hypoglycemia

The manifestations of hypoparathyrosis developed in a patient after strumectomy. What changes in the organism are observed in this case
Resorption of bone tissue
Hypophosphatemia
Acidosis
Hypocalcaemia
Decrease of neuromuscular excitability

Small height, disproportional development of the body, and insufficient mental development were found in a boy of 10 during examination. What hormone deficiency caused these changes
Adenocorticotropic hormone
Thyroxin
Parathormone
Thyrocalcitonin
Oxytocin

With the help of indirect calorimetrical t was determined that the basal measurement metabolism of the patient was 40% lower than the proper one. What endocrine gland hypofunction is the cause of described changes?
Thyroid gland
Adrenal glands
Epiphysis
Thymus
Pancrea

After suffered sepsis a bronze color of the skin typical for Addison's disease appeared in a woman aged 27 Hyperpigmentation occurs due to the increased secretion of
Growth hormone
Melanocytstimulating hormone
Adrenocorticotropic hormone

B-lipotropic hormone
Thyrotropic hormone

A patient with rheumatic arthritis was given hydrocortisone for a long period of time. He developed hyperglycemia, polyuria, glycosuria, and thirst. These complications after treatment develop due to the activation of the process of
Glycogenolysis
Gluconeogenesis
Glycogenesis
Glycolysis
Lipolysis

Fibrillary muscular tics of arms, legs and face appeared in a woman aged 46 after the operation on thyroid gland. These disorders may be eliminated by injection of
Thyroxin
Parathyroidin
Triiodthyronine
Thyrotropin
Calcitonin

Atrophy of the testis developed in an athlete who used androgen hormones. systemically This phenomenon is due to the inhibition of secretion of
Corticoliberine
Gonadotropic hormone
Prolactoliberin
Gomadoliberine
Testosterone

During the examination of the patient a doctor found out Cushing's diseases ase that is characterized by obesity. It is connected with:
impairment of ventromedial nuclei of hypothalamus
Excessive use of flats with meal
Inhibition of adrenalin synthesis by adrenal glands
Production of excessive amount of glycocoticoids
Hereditary tendency to hyperlipemia

A patient with diffuse toxic goiter has marked exophthalmia. The appearance of exophthalmia is explained in this pathology by:
Presence of immunoglobulins in the blood
Antibody circulation against thyroglobulin
Production of exophthalmia factor by hypophysis
Increase of adrenorecpetor sensitivity to catecholamines
Pathogenic of thyroid action prostaglandins

A patient with myxedema came to a doctor. Her face was puffy with poor facial expression; she had thickened nose and lips. These signs can be explained by
Increased permeability of capillary walls
Free filtration of sodium in glomeruli
Accumulation of hydrophilic mucous substances
Impairment of sensitivity of volumo- and osmoreceptor
Increase of sodium reapsorption in tubules (canaliculi)

After physic with exertion patient pheochromocytoma complains of tachycardia increased arterial pressure. and sharp pain In epigastric area. These attacks may be explained by
Release of norepinephrine by sympathetic nerves
Massive release of catecholamines by adrenal glands
Activation of hypothalamus vegetative nuclei
Increase of thyroid hormone secretion
Increased synthesis of adrenocorticotrophic hormone

Excessive secretion of a certain hormone was observed in a patient with pheochromocytoma -a tumor, which appears from the medulla of adrenal glands. How is this hormone called?
Adrenalin
Glucagon
Insulin
Thyroxin
Somatotropin

Adenoma, which grows from the cells of glomerular zone of cortex and is source of excessive formation of aldosterone was found in a patient. This resulted in a development of primary hyperaldosteronism or Conn's disease. What electrolyte exchange does this hormone influence?
Chlorine ion
Ferric ion
Calcium ion
Magnesium ion
Sodium ion

Weakness, thirst, sharp increase of neuromuscular excitability with the development of parathyroid tetany were observed in a dog 1-2 days later after resection of thyroid glands. What disturbance of electrolyte exchange takes place in this condition?
Hypermagnemia
Hypercalcaemia
Hypocalcaemia
Hypomagnemia
Hyponatremia

Removal of cancer tumor of the testis in a patient before the period of sexual maturity resulted in the development was accompanied by the deficiency of the production of:
Estrogens
Androgens
Kinines
Prostaglandins
Cytokines

Male patient aged 55 had an increase of pituitary gland dimensions and hyperplasia of adrenal At cortex. examination of the patient: BP-19090 mm Hg, content of blood glucose is 20 mmolL: there are glucosuria, obesity and histurism. What pathology are these changes typical for?
Cushing's disease
Adipose-genital dystrophy
Barraker-Simmond disease
Cushing's syndrome
Addison's disease

A patient aged 29 had acute massive blood loss during delivery. Then the following changes developed: acute loss of weight, atrophy of skeletal muscles, thinning of skin decrease of body temperature. hypotension. and hypoglycemia. What pathology of pituitary gland is the most possible in this case?
Parhon's syndrome
Sheehan's disease
Diabetes insipidus
Adipose-genital dystrophy
Pituitary dwarfism

A 28-years-old patient complains of flaccidity, quick mental and physical fatigue, and dyspeptic disorders. During the examination following was found out positive TB tests, hypoglycemia, BP 90/60 mm Hg hyponatremia, skin pigmentation. What disease of adrenal glands underlies observed symptoms?
Conn's syndrom
Cushing's syndrom
Addison's disease
Acute insufficiency of adrenal cortex
Hypofunction of medullar layer of adrenal glands

Which of the signs that develops in hyperthyrosis is the most important for making diagnosis?
Subfebrile temperature
Tachycardia

Increase of basal metabolism
Increase excitability
Disorder of sleep

A patient aged 4I complains of weakness, sweating, fever, tremor of hands, BP-160/90 mm Hg. Diffuse goiter was diagnosed (Basedow'sdiseas). What is the main mechanism of impairment of the function of cardio- vascular system in this disease
Increase of tonus of sympathetic nervous system tonus
Decrease of tonus of sympathetic nervous system tonus
Auto immune reactions
Increase of catabolism
Hyperthermia

A girl aged 5 had the symptoms of premature sexual development, menses, growth of mammary gland, adipose deposits in the field of pelvis and femur. The most possible cause of premature sexual development is:
Hyperplasia of adrenal glands
Adrenal adenoma
Hypopituitarism
Polycystic ovary syndrome
Hormone-active tumor of ovaries

Conn's syndrome was diagnosed i a patient who complained of muscular weakness, increased urination (at night), and increased arterial blood pressure. What typical for this syndrome
Increase of renin increase of aldosterone, and increase of potassium
Decrease of renin. increase of aldosterone and decrease of potassium
Decrease of renin, increase of aldosterone, and decrease of potassium
Decrease of renin, decrease of aldosterone. and decrease of potassium
Increase of renin, decrease of aldosterone. and increase of potassium

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Adrenal glands

Epiphysis
Thymus
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Thyroxin
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Increase of sodium reabsorption in tubules (canaliculi)
Increased permeability of capillary walls.

Weakness, thirst, sharp increase of neuromuscular excitability with the development of parathyroid tetany were observed in a dog 1-2 days later after resection of thyroid glands. What disturbance of electrolyte exchange takes place in this condition?
Hypocalcemia
Hypercalcemia
Hypomagnemia
Hypermagnemia
Hyponatremia
A man constantly lives in mountains. What changes of blood test indices can found in him?
Increased red blood cells number
Decreased reticulocytes count
Decreased color index
Appearance of erythroblasts in blood
Decreased hemoglobin content

After autopsy a forensic medical expert established that death of 20-year-old woman resulted from cyanide poisoning. What process disorder caused the death?
Tissue respiration
Oxygen transport by hemoglobin
Hemoglobin synthesis
Urea synthesis
Oxidative phosphorilation

Increased number of erythrocytes in blood test was revealed in people residing in village, which is situated in mountains at the altitude of 3000 m. What is the reason for changes in their blood?
Increased erythropoietin production
Increased vitamin B12 synthesis
Blood clotting
Change of spleen function
Increased circulating blood volume

The group of patients from sanatorium went to the mountains for excursion. Tachycardia and breathlessness developed in part of them in two hours after beginning of excursion. Which type of hypoxia do those disturbances result from?
Hypoxic
Hemic
Respiratory
Tissue
Circulatory

A driver slept in garage in a car with working engine. When he woke he had headache and later vomiting began in him. W hat compound formation in blood caused this state?
Carboxyhcmoglobin
Carbhemoglobin
Methemoglobin
Desoxihemoglobin
Oxyhemoglobin

A 40-ycars-old man took cyanic potassium by mistake. Me died instantly. What mitochondrial enzymes do cyanides block?
Cytochrome Oxydase
NAD-dependent Dehydrogenases
Cytochrome B
Cytochrome C
FAD-dependcnt enzymes

Pain in muscles appears after physical exertion in people, who move a little (have

hypodynamia) for a long time. What is the possible reason for this?
Accumulation of lactic acid in muscles
Decreased content of lipids in muscles
Increased content of ATP in muscles
Accumulation of creatinin in muscles
Enhanced decay of muscle proteins

The number of erythrocytes in alpinist's blood before going to mountains is $4,5x10^{12}$/L. What changes of erythrocytes number can develop at the altitude of 2500 m above sea level?
Absolute erythrocytosis
Absolute erythropenia
Relative erythropenia
Relative erythrocytosis
There won't be any changes

Dyspnea, increased heart beat rate, weaken of attention, foolishness occurred in sportsmen without acclimatization during the ascent to the altitude of 3000 m. Then weakness and disturbance of muscular coordination occurred. What was the reason for that condition?
Hypoxic hypoxia
Circulatory hypoxia
Respiratory hypoxia
Hemic hypoxia
Hypercapnia

Environmental pollution by nitric compounds occurs after accidcnt at a chemical factory. People, who Live at this region, have sharp weakness, headache, breathlessness, and giddiness. What docs hypoxia result from?
Carboxyhemoglobin formation
Cytochrome Oxidase inactivation
Dehydrogenases suppression
Decreased function of FAD-dependent enzymes
Methemoglobin formation

Total respiratory insufficiency was noticed on examination of blood gases partial pressure in a patient with bronchial asthma. What is the reason of respiratory hypoxia in this case?
Decreased ventilation
Increased perfusion
Decreased diffusion
Increased ventilation
Increased diffusion

Total respiratory insufficiency developed in a patient with lung disease. It manifested

by decreased $p0_2$ and increased pO_2 in patient's blood. What caused development of respiratory hypoxia and pronounced respiratory insufficiency?
Frequent shallow respiration
Excessive hyperventilation
Oxygen deficit in inspired air
Uneven ventilation of the lungs
Functional blood shunting in the lungs

Disorders of oxyhemoglobin formation have led to development of hemic hypoxia. What are the reasons for hemic hypoxia development?
Methcmoglobin formation
Inhibition of dehydrogenases
Pronounccd polycytemia
Activation of Glutation Peroxidase
Deficiency of riboflavinum

Which factors increase hypoxic injury of a cell under hypoxic conditions?
Catecholamines
Chinon derivations
Inhibitors of proteolysis
Glucocorticoids
Glutation-peroxidase

Symptoms of poisoning such as sharp weakness headache. Laboratory test of watermelon showed high level of nitrates. What is leading mechanism in pathogenesis of only one child poising?
Methemoglobin
reductase deficiency
Supcroxidc dismutasc deficiency
Cytochrome oxidase
blockade
Cilutathionc peroxidase
deficiency
Catalase deficiency

A man has been living high in mountains for a long time. What changes in his blood would develop?
Increase in quantity of
hemoglobin
Increase in number of leukocytes
Increase in diameter of blood vessels
Decrease in number of
leukocytes
Rare pulse

Tachypnea and hypopnoe developed in tourists, which had climbed to the altitude of 3000 in. These changes arc consequence of stimulation of
Chemoreceptorsof carotid sinus
Mechanoicccptors of pulmonary alveoli
Baroreceptors of arch of aorta
Neurons of the cerebral
cortex \
Motoneurons of spinal
cord

Cyanosis, swelling of lower extremities, dyspnea occurred in a 60-year-old patient suffering from heart failure. Long-tcrm adaptation of organism to hypoxia, occurring in that condition, can be supplied by
Tachycardia
Blood outlet from the depots
increased hemopoietic activity
Opening of non-functioning capillaries
Increased blood oxygenation

A dog has poisoning by unknown substance that caused its immediate death because of oxidation o cytochromes. What is that substance?
Potassium cyanide
potassium chloride
Potassium sulfate
Potassium orotate
Potassium permanganate

Gas alkalosis developed in group of alpinists due to rise to the Everest s top. So carbon dioxide partial pressure in their arterial blood makes up
30 mmllg
40 mmHg
50mmHg
60 mmHg
70 mmHg

Hemic hypoxia occurred in a patient. Which substance accumulation leads to disturbance of acid-base balance?
Lactates
Sulfates
Phosphates
Hydrocaibonates
Hydroxybutirates

During keeping salvage operations, several miners were taken out from the mine. I1icy were unconscious but without any visible damages. Jiг in mine had

considerable amounts of methane. Which type of hypoxia developed in those people?
Hemic
Circulatory
Tissue
Respiratory
Hypoxic

A 29-year-old patient with carbon monoxide poisoning was admitted to the hospital, lie had signs of severe hypoxia: pronounced dyspnea, cyanosis and tachycardia. Which changes of hemoglobin take place during carbon monoxide poisoning?
Carboxyhemoglobin formation
Methcmoglobin formation
Carbhemoglobin formation
Sulfhemoglobin formation
Oxyhemoglobin inactivation

A 54-year-old patient was admitted to hospital in hypoxic state, developed due to aspiration of \omit mass. Blood lest was taken aПcr the treatment of patient. Does erythrocytes number in peripheral blood change in the initial phase of hypoxia?
Increase due to outlet of the blood from depots
No change in initial phase
Decrease due to hemolysis of erythrocytes
Decrease due to depot of blood
Increase due to increase of hemopoiesis

Dyspnea, cyanosis of mucous membranes of the lips, moderate tachycardia (pulse rate of 80 beats per minute) suddenly occurred in a patient during the treatment of carious tooth. Which type of hypoxia developed in this patient?
Circulatory
Tissue
Hemic
Respiratory
Hypoxic

Urinary system A 38-year-old man is going undertreatment in a hospital for schizophrenia. Blood contents of glucose, ketone bodies, and urea in him are norm. Shock therapy with regular injections of insulin was led to the development of insulin coma, after that the patient's condition improved. What was the most possible reason for development of insulin coma?
Hypoglycemia
Glucosuria
Dehydratationoftissues
Metabolicacidosis
Ketonemia.

Smell of apples is felt from the patient in comatose state. The content of glucose mmol/L. Which coma is more possible in this case?
Ketoacidotic
Hypoglycemic
Toxic
Hyperosmolar
Lactatacidotic

A patient is drowsy, with cloudiness of consciousness, his reaction to the strong stimuli is slow. His skin is pale and dry. He has edemas, muscular fibrillar tremor, midriasis, Cheyne-Stokes respiration with ammonium smell. Pericardial rub was revealed during auscultation. Which type of coma has been developed in this patient?
Renal
Ketoacidotic
Hyperosmolar
Hepatic
Apoplectic

Increase of blood pressure and rapid pulse are noticed in a sportsman at the start before competitions Influence of which part of the CNS can above-mentioned changes be explained?
Cortex of hemispheares
Medullaoblongata
Mesencephalon
Diencephalons
Hypothalamus

The close clinical examination of the patient, admitted to the reanimation department in unconscious condition allowed to make a conclusion that the patient was in uremic comatose state. Which symptom is more characteristic for this type of coma?
Hyperglycemic
Acetonesmell fromhismouth
Polyuria
Hypernitremia
Non-gasalkalosis

Ptyalism, bradycardia (heart rate 45 beats per minute), miosis are observed in a man. What is the most possible reason for such change?
Increase of parasympathetic influence
Increase of sympathetic influence
Decrease of sympathetic influence .
Decrease of parasympathetic influence.

Decrease of vegetative influence

The reactions, typical for stimulation of parasympathetic nerves, appeared after irritation of throphogenic zone of hypothalamus, including preopticnucleas and anterior hypothalamic area. Whatappearsinthiscase?
Decrease o BP
Tachycardia
Mydriasis
Exophthalmus
Hyperglycemia

After amputating the upper extremity a patient had a bad pain in it. Which mechanism of the pain feeling formation is more possible in this case?
Phantom
Reflex
Hyposecretionofendorphin
Hypersecretionofendorphin
Hyposecretionofencephalin

A patient had hemiplegia after insult. What disorder is observed in this case?
Movement
Taste
Balance
Vision
Hearing

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the patient's condition improved. What was the most possible reason for development of insulin coma?
Hypoglycemia
Glucosuria
Dehydratation of tissues
Metabolic acidosis
Ketonemia

Smell of apples is felt from the patient in comatose state. The content of glucose is 18 mmol/L. Which coma is more possible in this case?
Ketoacidotic
Hypoglycemic
Toxic
Hyperosmolar
Lactatacidotic

Ptyalism, bradycardia (heart rate 45 beats per minute), miosis are observed in a man. What is the most possible reason for such changes?
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Increase of sympathetic influence
Decrease of sympathetic influence
Decrease of parasympathetic influence
Decrease of vegetative influence

The reactions. typical for stimulation of parasympathetic nerves, appeared after irritation of throphogenic zone of hypothalamus, including preopticnucleas and anterior hypothalamic area. What appears in this case?
Decrease of BP
Tachycardia
Mydriasis
Exophthalmus
Hyperglycemia

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Hypernitremia
Hyperglycemic
Acetone smell from his mouth
Polyuria
Non-gas alkalosis

The close clinical examination of the patient, admitted to the reanimation department in unconscious condition allowed to make a conclusion that the patient was in state of diabetic coma. Which symptom is more characteristic for this type of coma?
Hyperglycemia
Smell of ammonium from the mouth
Anuria
Metabolic alkalosis
Decrease of content of nonprotein nitrogen in serum.

Increase of blood pressure and rapid pulse are noticed in a sportsman at the start before competitions. Influence of which part of the CNS can above-mentioned changes be explained?
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Medulla oblongata
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Decrease of sympathetic influence
Decrease of parasympathetic influence
Decrease of vegetative influence

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Exophthalmus
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Hypoglycemic
Toxic
Hyperosmolar
Lactatacidotic

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Movement
Taste
Balance
Vision
Hearing

A patient is ill with epilepsy. Specific centers are formed in the brain – they function according to the principle of pathological determinant. What is the mechanism of the formation of these centers?
Formation of a pathological excitation generator
Protective inhibition
Intoxication
Hypoxia
Parabiosis

Neurosis was experimentally modeled by applying a very strong unconditioned stimulus. What kind of somatopathology can develop as a consequence of neurosis?
Duodenal ulcer
Pancreatitis
Glomerulonephritis
Hepatitis
Myocarditis

A woman ill with myasthenia had respiratory impairment, which required artificial lung ventilation. What respiratory impairment has developed in this case?
Neuromuscular
Obstructive
Central
Thoracodiaphragmal
Destructive

A 68-year-old woman had stroke. She cannot move both right extremities. Muscle tone and reflexes are increased. Pathological reflexes are observed. What kind of paralysis is it?
Central
Tetraplegia
Paraplegia
Peripheral
Reflex

After a road accident a patient was diagnosed with trauma of the brachium and median nerve. Motor and sensitive functions are impaired. The patient complains of stinging intolerable pain. What kind of pain is it?
Causalgia
Somatic
Visceral
Reflected
Phantom