

A patient has developed anuria. Blood pressure is 50/20 mm Hg. What process of uropoiesis caused acute decrease of urination? (2016, N 5, TB)

+Glomerular filtration

Obligate reabsorption

Facultative reabsorption

Tubular secretion

In an emergency situation a scuba diver has quickly risen from the depth to the surface in violation of safety regulations. He is unconscious, presents with respiratory failure and cardiac activity disorder as the result of decompression sickness. What complication can develop in the scuba diver? (2016, N 15, TB) (2015, N 12, TB)(2013, 2012)

+Gas embolism

Fat embolism

Air embolism

Cellular embolism

Thromboembolism

Parents of a 10-year-old child have made an appointment with endocrinologist due to complaints of the child's low height. The child's appearance is corresponding with that of a 5-year-old. What hormone causes such changes in physical development, if its secretion is disrupted? (2016, N 16, TB)

+Somatotropic hormone

Adrenocorticotrophic hormone

Thyroxin

Testosterone

Insulin

A patient complains of tachycardia, insomnia, weight loss, irritability, sweating. Objectively: the patient has goiter and slight exophthalmos. What gland is affected, and what functional disorder is it? (2016, N17, TB)

+Hyperthyroidism

Hypothyroidism

Hyperparathyroidism

Hypoparathyroidism

Adrenomedullary hyperfunction

A patient has been hospitalised with pneumonia. What kind of respiratory failure does the patient have? (2016, N 19, TB)

+Restrictive

Obstructive

Central

Peripheral
Thoracic diaphragm

In the state of fright the following signs can be observed: acute pallor of face, tremor of extremities. What kind of ischemia can be observed in such a condition? (2016, N 20, TB)

+Angiospastic

Compression

Obstructive (thrombus)

Metabolic

Obstructive (vascular wall thickening)

An injured person exhibits the following signs at the site of trauma: skin redness, throbbing small arteries, elevated local temperature, increased tissue turgor. What local blood circulation disorder are these presentations typical of? (2016, N 26, TB) (2013)

+Arterial hyperemia

Venous hyperemia

Thrombosis

Embolism

Ischemia

At the sixth month of pregnancy a woman has been diagnosed with severe iron-deficiency anemia. Appearance of the following elements in her blood became the diagnostic character: (2016, N 35, TB) (2015, N 37, TB)

+Hypochromic erythrocytes

Macrocytes

Megalocytes

Reticulocytes

Erythroblasts

An ophthalmologist has detected increased time of dark adaptation in a patient. What vitamin deficiency can result in such symptom? (2016, N 81, TB)

+A

C

K

B1

B6

A 70-year-old patient presents with cardiac and cerebral atherosclerosis. Examination revealed changes of blood lipid spectre. Increase of the following lipoproteins plays a significant role in atherosclerosis pathogenesis: (2016, N 82,

TB)

+Low-density lipoproteins

Very low-density lipoproteins

Intermediate density lipoproteins

High-density lipoproteins

Chylomicrons

During containment measures following Chernobyl Nuclear Power Plant disaster a worker has been exposed to a dose of ionizing emission of 6 Gy (600 R). The worker complains of general fatigue, nausea, dizziness, labile blood pressure and heart rate, short-term leukocytosis with lymphopenia. What stage of acute radiation sickness can be characterized by such presentations? (2016, N 83, TB)

+Prodromal

Manifest

Latent

Recovery

Long-term consequences

A woman noticed that a cut on her skin was still bleeding even after 20 minutes had passed. What vitamin deficiency causes such condition? (2016, N 88, TB) (2015, N 83, TB)

+ Vitamin K

Vitamin A

Vitamin D

Vitamin E

Vitamin B12

An elderly man exhibits low levels of red blood cells and hemoglobin in blood; however, his color index is 1,3. Blood smear analysis revealed megaloblasts. What type of anemia is observed in this case? (2016, N 98, TB)

+B12-folic acid deficiency

Iron-deficiency

Acquired hemolytic

Hereditary hemolytic

Chronic posthemorrhagic

After drinking milk a 1-year-old child developed diarrhea, flatulence. The baby is likely to have deficiency of the following enzyme: (2016, N 100, TB) (2015, N 94, TB)

+Lactase

Maltase

Aldolase

Hexokinase
Glycosidase

A patient with alcoholic cirrhosis complains of general weakness and dyspnea. The following is revealed: decrease of blood pressure, ascites, dilation of superficial veins of the stomach anterior wall, esophageal varicose veins dilatation, splenomegaly. What hemodynamics disorder does the patient suffer from? (2016, N 111, TB) (2015, N 104, TB) (2014, N 134, TB)(2012)

Portal hypertension
+Left ventricular failure
Right ventricular failure
Cardiac insufficiency
Collapse

A patient has icteric skin; unconjugated bilirubin content in blood is high; conjugated bilirubin in urine is not detected. There is significant amount of urobilin in urine and stercobilin in feces. Name the pathology characterized by given symptoms: (2016, N118, TB) (2015, N 117, TB) (2014, N 155, TB)

+Hemolytic jaundice
Obstructive jaundice
Jaundice of the newborn
Hepatocellular jaundice
Atherosclerosis

A 46-year-old patient was found to have hyperactivity of creatine kinase in the blood serum. What pathology can be suspected? (2016, N 121, TB) (2015, N 124, TB)

+Myocardial infarction
Acute pancreatitis
Chronic hepatitis
Hemolytic anemia
Renal failure

A patient with pulmonary carcinoma has developed a case of pleurisy. Large amount of hemorrhagic exudate was obtained for analysis. What component is specific for hemorrhagic exudate? (2016, N 123, TB)

+Erythrocytes
Leukocytes
Platelets
Fibrin
Pus

Cataract (lenticular opacity) has developed in a 52-year-old woman with diabetes mellitus. Lenticular opacity was caused by intensification of the following processes: (2016, N 125, TB) (2015, N 128, TB)

+Protein glycosylation

Lipolysis

Ketogenesis

Protein proteolysis

Gluconeogenesis

A man received a radiation dose of 30 Gy. He presents with necrotic angina, disorders of the gastrointestinal tract. Blood tests revealed anemia, leukopenia and thrombocytopenia. What stage of acute radiation sickness is observed in the patient? (2016, N 127, TB)

+Manifest illness stage

Prodromal stage

Latent stage

Recovery

-

A patient with croupous pneumonia presents with sharp increase of body temperature up to 39⁰C, which persisted for 9 days with daily amplitude of 1 degree. What temperature curve could be observed? (2016, N 129, TB)

+Stable

Hectic

Septic

Recurrent

Atypical

A patient of a neurology unit suffers from paralysis of all limbs. Name this condition: (2016, N 158, TB)

+ Tetraplegia

Paraplegia

Hemiplegia

Paresis

Hypodynamia

The most severe and dangerous complication of diabetes mellitus is hypoglycemic coma that is characterized by loss of consciousness and is lethal, unless efficient emergency treatment is received by patient. What is the main pathogenetic component of hypoglycemic coma? (2016, N 159, TB)

+Carbohydrate deficiency and low energy of cerebral neurons

Carbohydrate deficiency and low energy of myocardium cells

Blood hyperosmia
Noncompensated ketoacidosis
Respiratory alkalosis

A woman complains of nausea, vomiting, skin itch. She was diagnosed with mechanical jaundice. What is the possible cause of skin itch in such a condition? (2016, N 165, TB)

+Bile acids accumulating in the blood
Increased blood content of indirect bilirubin
Cholesterol accumulating in the blood
Direct bilirubin appearing in the blood
Erythrocyte disintegration products accumulating in the blood

During ultrasound investigation a patient has been diagnosed with bilateral stenosis of renal artery with atherosclerotic genesis. Specify the bioactive substance that due to its excessive secretion is the key component of arterial hypertension pathogenesis in the given case: (2016, N 168, TB) (2015, N 159, TB)

+Renin
Cortisol
Vasopressin
Noradrenaline
Thyroxin

Modelling of immobilization stress is performed on a test animal – guinea pig – that starved for a day. Dissection revealed hyperemic gastric mucosa with multiple erosions. What theory of ulcer formation is confirmed by this test? (2016, N 188, TB)

+Corticovisceral (stress)
Vascular
Inflammatory
Mechanical
Peptic

A patient in the state of ketoacidotic coma presents with loud rapid respiration: labored expiration with tension of expiratory muscles occurs after deep inspiration. Name the type of pathologic respiration: (2016, N 192, TB)

+Kussmaul's
Cheyne-Stokes'
Gasping
Stenotic
Biot's

A 40-year-old man presents with rapid weight gain after he had suffered a severe craniocerebral trauma. On examination the patient's weight was 125 kg, with his height being 175 cm. What mechanism of obesity development is the most likely in this case? (2016, N 195, TB) (2015, N 195, TB)

+Hypothalamic

Alimentary

Hormonal

Hereditary

-

A victim of a traffic accident is hospitalized at a resuscitation unit. Objectively: the patient is unconscious, BP is 90/60 mm Hg, high blood content of creatinine and urea is observed, diurnal diuresis is 80 ml. Characterize the patient's diurnal diuresis: (2015, N 2, TB)

+Anuria

Oliguria

Polyuria

Pollakiuria

Nocturia

A newborn child born from Rhnegative mother in the result of her third pregnancy presents with gradually worsening jaundice, irritated central nervous system, anemia. What type of jaundice does the infant suffer from? (2015, N 10, TB)

+Hemolytic

Hepatocellular

Obstructive

Parasitic

Toxic

The patient has been hospitalised with pneumonia. What kind of respiratory failure does the patient have? (2015, N 13, TB) (2014, N 9, TB)

+Restrictive

Obstructive

Central

Peripheral

Thoracic diaphragm

What disorder of local circulation is characterized by pallor, local temperature drop, pain, local sensitivity disorder, reduction of the organ volume? (2015, N 21, TB)

+Ischemia

Venostasis

Thrombosis
Embolism
Arterial hyperemia

Heart rate of a person at rest is 40/min. What structure is the pacemaker of heart in this man? (2015, N 23, TB)

+Atrioventricular node
Sinoatrial node
His' bundle
His' bundle branches
Purkinje fibers

The volume of air exhaled by a healthy person during quiet breathing was measured with a spirometer and determined to be 0,5 liter. What is this volume called? (2015, N 24, TB)

+Tidal volume
Inspiratory reserve volume
Expiratory reserve volume
Vital capacity of lungs
Residual volume

A patient has been taking diclofenac sodium for a long time. A family physician withdrew this drug and prescribed celecoxib. What disease was the cause of drug substitution? (2015, N 25, TB)

+Peptic ulcer
Bronchial asthma
Urolithiasis
Arterial hypertension
Chronic hepatitis

Diet of a human must contain vitamins. What vitamin is usually prescribed for treatment and prevention of pellagra? (2015, N 53, TB)

+Vitamin PP
Vitamin C
Vitamin A
Vitamin B1
Vitamin D

A 22-year-old man was stung by bees; the affected area became hyperemic and edematous. What is the leading mechanism of edema development in this patient? (2015, N 59, TB)

- +Increased permeability of the capillaries
- Decreased hydrostatic blood pressure in the capillaries
- Increased oncotic pressure of tissue fluid
- Impaired lymphatic efflux
- Reduced oncotic pressure of blood

A patient has obstruction of the common bile duct. Which of these substances is usually found in urine in such cases? (2015, N 60, TB)(2013, 2012)

- +Bilirubin
- Ketone bodies
- Uric acid
- Creatinine
- Glucose

A patient with systemic lupus erythematosus has developed diffuse affection of kidneys followed by proteinuria, hypoproteinemia, extensive swelling. What mechanism of proteinuria development is the most likely in this case? (2015, N 63, TB)

- +Autoimmune disorder of the nephron glomerulus
- Inflammatory disorder of the nephron tubule
- Ischemic disorder of the nephron tubule
- Increased concentration of blood proteins
- Disorder of the urinary tracts

A 40-year-old man diagnosed with gastric ulcer has developed the symptoms anew after a long period of dormancy. Such disease course can be characterized as a: (2015, N 92, TB)

- +Recurrence
- Remission
- Recovery
- Latency
- Prodromal phase

An elderly patient exhibits low levels of red blood cells and hemoglobin in blood, but the color index is 1,3. Blood smear analysis revealed megaloblasts. What type of anemia is observed in this case? (2015, N 93, TB)

- +B₁₂-folic acid deficiency
- Iron-deficiency
- Acquired hemolytic
- Hereditary hemolytic
- Chronic posthemorrhagic

A man presents with signs of albinism: blonde hair, extreme photosensitivity, impaired vision. What amino acid metabolism is disrupted in the patient? (2015, N 95, TB)

- +Tyrosine
- Methionine
- Proline
- Histidine
- Valine

A patient complains of pain in the small joints. High concentration of uric acid is detected in his blood plasma. What pathology causes such changes? (2015, N 118, TB)

- +Gout
- Diabetes mellitus
- Phenylketonuria
- Lesch-Nyhan syndrome
- Diabetes insipidus

A patient suffering from coronary heart disease, who had had two myocardial infarctions of left ventricular wall, presents with bubbling breathing and dyspnea. Pulmonary auscultation reveals numerous moist crackles. What kind of heart failure is it? (2015, N 122, TB)

- +Left ventricular
- Right ventricular
- Compensated
- Subcompensated
- Combined

A man received a radiation dose of 30 Gy. He presents with necrotic angina, disorders of the gastrointestinal tract. Blood tests revealed anemia, leukopenia and thrombocytopenia. What period of acute radiation sickness is observed in the patient? (2015, N 130, TB)

- +Height of disease
- Primary reactions
- Imaginary wellbeing
- End of disease

In the course of an experiment in the mesenteric vein of a toad a thrombus was created with a crystal of common salt. What processes occurred during the first stage of thrombus formation? (2015, N 131, TB)

- + Adhesion, aggregation, agglutination of platelets

Production of active thromboplastin

Production of thrombin

Production of fibrin monomer

Production of fibrin polymer

A patient has a mental disorder due to the insufficient synthesis of gammaaminobutyric acid in the brain. Such pathological changes might be caused by the deficiency of the following vitamin: (2015, N 135, TB)

+Pyridoxine

Tocopherol

Cyanocobalamin

Folic acid

Riboflavin

A patient suffers from mucosal dryness and mesopic vision disorder. What vitamin deficiency causes these symptoms? (2015, N 149, TB)

+A

P

E

C

D

A 5-year-old child presents with abdominal distension, abdominal cramps, and diarrhea occurring 1-4 hours after drinking milk. Described symptoms are caused by the lack of enzymes that break up: (2015, N 154, TB)

+Lactose

Glucose

Maltose

Saccharose

Fructose

A patient was visiting a pharmacy, when he suddenly felt unwell. He developed palpitations, rapid heart rate, pain in the chest that after several minutes spread to the left scapula and left side of the head. What condition should be considered first? (2015, N 168, TB)

+Ischemic heart disease

Peptic gastric ulcer disease

Dysphagia

Pneumonia

Somatoform autonomic dysfunction

A 25-year-old-patient with the II degree thermal burns addressed a doctor. Objectively: there are large blisters on the upper limbs; the blisters are filled with clear exudate containing mostly water and albumines with isolated leukocytes. Name the type of the exudate: (2015, N 181, TB)

+Serous

Catarrhal (mucous)

Fibrinous

Purulent

Hemorrhagic

After ischemic stroke a 67-year-old patient developed reduced mobility of the left leg. Name this condition: (2015, N 192, TB)

+Paresis

Paralysis

Myasthenia

Hyperkinesia

Tremor

A 32-year-old patient with cerebellar tumor was delivered to an admission room of a hospital. The patient presents with ataxia that can be characterized by: (2015, N 193, TB)

+Disrupted coordination of movements

Involuntary contraction of skeletal muscles

Increased muscle tone

Pathological reflexes

Irregular force and direction of movements

During calculous cholecystitis attack the patient has developed the following symptoms: saponated feces and steatorrhea. What stage of fats metabolism is disrupted according to those symptoms? (2014, N 3, TB)

+Fat digestion, absorption and secretion

Fat absorption

Intermediary metabolism of fats

Fats metabolism in adipose tissue

Depositing disruption

Parents of the 10-year-old child have made an appointment with endocrinologist due to complaints of child's low height. The child's appearance is corresponding with that of 5-year-old child. What hormon secretion disorder causes such physical development changes? (2014, N 7, TB)

+Somatotropic hormone

Adrenocorticotropic hormone

Thyroxin
Testosterone
Insulin

The 55-year-old patient has been hospitalised due to chronic cardiac failure. Objectively: skin and mucosa are cyanotic, tachycardia, tachypnea. What kind of hypoxia does the patient have? (2014, N 8, TB) (2012)

+Circulatory
Anemic
Hemic
Tissue
Hypoxic

The patient with acute cardiac failure has developed dyspnea, tachycardia and cyanosis during physical exertion. Name the type of hypoxia. (2014, N 23, TB)

+Circulatory
Respiratory
Hemic
Hypoxic
Tissue

At the sixth month of pregnancy the female patient has been diagnosed with severe iron-deficiency anemia. Diagnostic character was the appearance of the following in blood: (2014, N 36, TB)

+Hypochromic erythrocytes
Macrocytes
Megalocytes
Reticulocytes
Erythroblasts

1 minute after the patient had been administered penicillin the patient's arterial pressure sharply dropped, pulse became thready, cold sweating and clonic convulsions began. Name this condition. (2014, N 41, TB)

+Anaphylactic shock
Traumatic shock
Cardiogenic shock
Septic shock
Burn shock

The patient with acute left ventricular failure has developed edema of lungs. What peripheral circulation disorder taking place in the lungs has caused this complication? (2014, N 56, TB)

- +Venous hyperemia
- Arterial hyperemia
- Neuroparalytic arterial hyperemia
- Pulmonary artery thrombosis
- Ischemia

Knee joint enlargement and cutaneous edema has developed in the 46-year-old patient with acute knee joint inflammation on the second day. What stage of inflammation progressing are these symptoms usually observed at? (2014, N 57, TB)

- +Exudation
- Alteration
- Proliferation
- Regeneration
- Sclerosis

In the process of chemical solution preparation laboratory assistant's forearm was exposed to concentrated hydrochloric acid. There are burning pain, hyperemia and swelling of the damaged area. What pathologic process are these symptoms evidential of? (2014, N 59, TB)

- +Inflammation
- Tumor
- Embolism
- Thrombosis
- Lymphostasis

In 1915 Japanese scientists Katsusaburo Yamagiwa and Koichi Ichikawa became the first, who induced experimental tumors, by painting ears of rabbits with coal tar. What method of experimental tumor inducing did they use? (2014, N 65, TB)

- +Chemical induction
- Transplantation
- Explantation
- Cell-free filtrate induction
- Radioisotope induction

The alleged diagnosis of the newly hospitalised in-patient is leukemia. What symptom among those given below is diagnostic character differentiating acute leukemia from chronic leukemia? (2014, N 66, TB)

- Leukemic hiatus
- +Significant increase of leucocytes number
- Leukosis rate
- Eosinophil and basophil levels

Gumprecht's shadows (smudge cells)

Catabolism of body's own tissue proteins is intensified during such diseases as thyrotoxicosis and tuberculosis. This process is attended by intensive synthesis in liver and subsequent excretion with urine of the following: (2014, N 88, TB)

+ Urea

Glucose

Acetone bodies

Fatty acids

Nucleotides

Tetanic spasms of skeletal muscles occur under low calcium concentration in blood. What endocrine disorder can this condition be associated with? (2014, N 98, TB)

+Hypofunction of parathyroid glands

Hyperfunction of adrenal cortex

Hypofunction of adrenal cortex

Hyperthyroidism

Hypothyroidism

A newborn infant has hemolytic jaundice caused by rhesus incompatibility. What bile pigment will be concentrated highest in the blood of this infant? (2014, N 107, TB)

+Unconjugated bilirubin

Conjugated bilirubin

Urobilinogen

Stercobilinogen

Bile acids

The patient with acute cardiac insufficiency has decreased urine excretion caused by reduction of filtering taking place in glomerules. What causes this drop in filtration? (2014, N 108, TB)

+Decrease of arterial pressure

Increase of hepatic blood flow

Exsiccosis

Duct lumen obstruction

Decrease in number of functioning glomerules

The 49-year-old female patient suffering long-term from pancreatic diabetes has developed the following symptoms after administering insulin: weakness, facial pallor, palpitation, anxiety, double vision, numbness of lips and tongue apex. Glucose molar concentration in blood was 2,5 mmol/l. What complication has developed in the patient? (2014, N 109, TB)

- +Hypoglycemic coma
- Hyperosmolar coma
- Hyperglycemic coma
- Hyperketonemic coma
- Uremic coma

The 40-year-old patient has been diagnosed with gastric ulcer, disease symptoms making reappearance after prolonged period of dormancy. How can this kind of disease progression be qualified? (2014, N 110, TB)

- +Relapse
- Remission
- Recovery
- Latent period
- Prodromal stage

The 55-year-old female patient has developed a case of acute pancreatitis caused by greasy food. What is the main pathogenesis step of this disorder? (2014, N 111, TB)

- +Premature activation of enzymes in gland ducts and cells
- Pancreatic juice deficiency
- Low bile production in liver
- Fats digestion disruption
- Acute bowel obstruction

As the result of taking herbal medicine the 30-year-old patient has developed anaphylactic allergic reaction and blood leukocytosis. What kind of leukocytosis is characteristic of this case? (2014, N 112, TB)

- +Eosinophilia
- Monocytosis
- Lymphocytosis
- Basophilia
- Neutrophilia

Milk intake has resulted in the one-year-old child having diarrhea and abdominal distension. What enzyme deficiency does the child have? (2014, N 115, TB)

- +Lactase
- Maltase
- Aldolase
- Hexokinase
- Glycosidase

The 56-year-old patient has developed megaloblastic anemia in the course of alcoholic cirrhosis. What vitamin deficiency is the main cause of anemia in this patient? (2014, N 116, TB)

+Folic acid

Lipoic acid

Biotin

Thiamine

Pantothenic acid

The dispensing chemist's arterial pressure has increased (160/110 mm Hg) due to his conducting long-term analytical analysis (neurosis). What neurohumoral regulation changes can cause increased arterial pressure in the given case? (2014, N 133, TB)

+Sympathoadrenal system activation

Activation of aldosterone producing and secretion

Renin-angiotensin system activation

Kallikrein-kinin system activation

Sympathoadrenal system inhibition

The 13-year-old female patient having suffered from measles complains of dry mouth, thirst, body weight loss, polyuria, her glucose concentration in blood is 16 mmol/l. What disease can be suspected? (2014, N 141, TB)

+Type I pancreatic diabetes

Type II pancreatic diabetes

Diabetes insipidus

Steroidogenic diabetes

Glycogenosis

The patient with mushroom poisoning has developed the following symptoms: yellow coloring of skin and sclera, dark-colored urine. Hemolytic jaundice was diagnosed. What pigment causes such coloring of the patient's urine? (2014, N 142, TB)

+Stercobilin

Conjugated bilirubin

Biliverdin

Unconjugated bilirubin

Verdohemoglobin

The patient has been admitted to the hospital with complaints of general fatigue, headache, lumbago, edema of face and extremities. Urine analysis revealed proteinuria, hematuria and cylindruria. What is the main pathogenetic mechanism of edema formation during glomerulonephritis? (2014, N 168, TB)

- +Decrease of oncotic blood pressure
- Increase of vascular permeability
- Increase of hydrodynamic blood pressure
- Hormonal disbalance
- Lymph flow disruption

Fluorography examination of the 59-year-old patient has revealed welldefined shadow, which is characteristic to tumor, in the lower part of the left lung. What trait is characteristic of benign tumor? (2014, N 171, TB)

- +Expansive growth
- Metastasis
- Cancer cachexia
- Invasion in surrounding tissues
- Infiltrating growth

After taking phenacetin a patient developed acute sore throat, fever. Examination enabled doctors to make a diagnosis of necrotic angina and agranulocytosis. Agranulocytosis can be characterized by a decrease in the amount of the following WBCs: (2013, 2012)

- +Neutrophils
- Eosinophils
- Basophils
- Lymphocytes
- Monocytes

A patient has been hospitalized for chronic heart failure. Objectively: skin and mucous membranes are cyanotic, the patient has tachycardia, tachypnea. What type of hypoxia has developed in the patient? (2013)

- Circulatory
- +Anemic
- Hemic
- Tissue
- Hypoxic

A patient with a diagnosis of drug poisoning has been admitted to the resuscitation department. The patient is in grave condition. Respiration is rapid, superficial, with periods of apnea (Biot's respiration). What was the main cause of the development of periodic breathing in the patient? (2013)

- +Inhibition of the respiratory center function
- Impaired function of spinal cord motoneurons
- Impaired function of the neuromuscular system
- Diminished chest mobility

Pulmonary dysfunction

On the 2nd day after developing acute inflammation of the knee joint, the patient exhibits the joint enlargement, swelling of the skin. At what stage of inflammation are these signs typically observed? (2013)

+Exudation

Alteration

Proliferation

Regeneration

Sclerosis

A patient had been diagnosed with right lung cancer and administered surgical treatment. After right-sided pneumonectomy the patient developed evident dyspnea. What form of respiratory failure developed in this patient? (2013)

+Pulmonary restrictive

Central

Peripheral

Pulmonary obstructive

Thoracodiaphragmal

A 22-year-old male was stung by bees, the affected region became hyperemic and edematous. What is the leading mechanism of edema development in this patient? (2013)

+Increased permeability of the capillaries

Decreased hydrostatic blood pressure in the capillaries

Increased oncotic pressure of tissue fluid

Impaired lymphatic efflux

Reduced oncotic pressure of blood

A patient with chronic renal failure exhibits azotemia, hypo- and isosthenuria. What is the main factor in the pathogenesis of these symptoms in the patient? (2013)

+Reduction of existing nephrons mass

Increase in glomerular filtration rate

Reduction of tubular secretion

Disturbance of the permeability of the glomerular membrane

Decrease in glomerular filtration rate in each nephron

A hospital admitted a patient with arterial hypertension induced by renal artery stenosis. The patient complains of persistent nausea and headache. The main element in the pathogenesis of hypertension is the activation of the following system: (2013, 2012)

- +Renin-angiotensin
- Hypothalamic-pituitary
- Kallikrein-kinin
- Sympathoadrenal
- Parasympathetic

Addison's (bronze) disease is treated with glucocorticoids. Their effect is provided by the potentiation of the following process: (2013)

- +Gluconeogenesis
- Glycolysis
- Pentose phosphate cycle
- Glycogenolysis
- Ornithine cycle

After an insulin injection a 45-yearold female with a long history of diabetes mellitus has developed weakness, paleness, palpitation, anxiety, double vision, numbness of lips and the tip of tongue. Blood glucose is at the rate of 2,5 mmol/l. What complication has developed in the patient? (2013, 2012)

- +Hypoglycemic coma
- Hyperosmolar coma
- Hyperglycemic coma
- Hyperketonemic coma
- Uremic coma

A 45-year-old male patient was diagnosed with stomach ulcer. After the conservative treatment the pain and heartburn disappeared, the function of the gastrointestinal tract was normalized. Endoscopic examination of stomach revealed cicatrization of the ulcer. Qualify this course of the disease: (2013)

- +Remission
- Relapse
- Latent period
- Recovery
- Prodromal stage

An older patient exhibits low levels of red blood cells and hemoglobin in blood, but the color index is 1,3. Blood smear analysis revealed megaloblasts. What type of anemia is observed in this case? (2013)

- +B₁₂-folic acid deficiency
- Iron-deficiency
- Acquired hemolytic
- Hereditary hemolytic
- Chronic posthemorrhagic

In response to the administration of protein drugs, a patient developed an allergic reaction. The development of the allergic reaction is caused by the increased synthesis of the following compound: (2013)

- +Histamine
- Choline
- Adrenaline
- Histidine
- Serotonin

A patient with acute myocarditis exhibits rapid fatigability, shortness of breath, edemata of legs, hepatomegaly. Classify the type of heart failure by the mechanism of its development: (2013)

- +Myocardial
- Overload
- Compensated
- Subcompensated
- Combined

After a contact with a person having an infectious diseases, the disease pathogens entered the patient's body and started to multiply, but the symptoms of the disease were not yet observable. What period of the disease is this typical for? (2013)

- +Latent
- Prodromal
- Manifest illness stage
- Clinical outcome
- Relapse

A male patient developed fever up to 40⁰C, there are vomiting, diarrhea, the patient is in grave condition. Blood osmolality is 270 mOsm/l. What disorder of water-salt metabolism is observed in the patient? (2013)

- +Hypoosmolar hypohydration
- Isoosmolar hypohydration
- Hyperosmolar hypohydration
- Isoosmolar hyperhydration
- Hypoosmolar hyperhydration

A male received a radiation dose of 30 Gy. He presents with necrotic angina, disorders of the gastrointestinal tract. Blood tests revealed anemia, leukopenia and thrombocytopenia. What phase of acute radiation syndrome is observed in the patient? (2013)

- +Manifest illness stage

Primary reactions

Latent

Outcome of disease

As a result of hypothermia a male patient developed acute diffuse glomerulonephritis. What type of allergic reaction caused damage to the glomerular capillaries in the patient? (2013)

+Immunocomplex

Anaphylactic

Cytotoxic

Cell-mediated

Stimulating

As a result of an emergency situation (shipwreck) a man had to drink sea (salty) water. What form of water-salt imbalance may occur in this case? (2013)

+Hyperosmolar hyperhydration

Hypoosmolar hyperhydration

Hypotonic hyperhydration

Isoosmolar hyperhydration

Isotonic hyperhydration

Examination of the lower limbs of a 40-year-old patient with coronary artery disease and vascular disease of the lower limbs (obliterating endarteritis) revealed skin pallor and dystrophy, local temperature decrease, sense shock, pain. The patient is likely to have the following disorder of the peripheral blood circulation: (2012)

+Obstruction ischemia

Compression ischemia

Angiospastic ischemia

Venous hyperaemia

Arterial hyperaemia

A patient has been found to have sugar in the urine. Blood glucose is normal. Arterial pressure is normal. What is the mechanism of glycosuria development in this case? (2012)

+Disturbance of glucose reabsorption in the nephron tubules

Insulin deficiency

Hyperfunction of adrenal medulla

Hyperfunction of thyroid gland

Hyperfunction of adrenal cortex

A newborn born to an Rh-negative mother (3rd pregnancy) presents with progressing jaundice, symptoms of CNS excitation, anemia. What type of jaundice is it? (2012)

+Hemolytic

Parenchymatous

Obstructive

Parasitic

Toxic

A group of alpinists climbing to the top had their blood tested. The test revealed erythrocytosis and an increase in hemoglobin rate. What type of hypoxia caused the stimulation of erythropoiesis in the bone marrow? (2012)

+Hypoxic

Combined

Hemic

Circulatory

Tissue

A continuous stay in the mountains causes an increase of blood oxygen capacity. What is the possible reason for this phenomenon? (2012)

+Development of functional erythrocytosis

Increase of PO_2 rate in the air

Increase of PCO_2 rate in the air

Decrease in respiratory rate and depth

Development of gas acidosis

A patient with systemic lupus erythematosus has developed a diffuse renal affection accompanied by proteinuria, hypoproteinemia, massive edema. What is the mechanism of proteinuria development in this case? (2012)

+Autoimmune affection of glomeruli

Inflammation of renal tubules

Ischemic affection of tubules

Blood protein increase

Affection of urinary tracts

A warmly dressed child has spent a considerably long time out of doors. This resulted in body temperature elevation and general weakness development. What form of thermoregulation disorder is observed in this case? (2012)

+Exogenous hyperthermia

Endogenous hyperthermia

Fever

Heat shock

Centrogenous hyperthermia

A patient with pneumosclerosis has blood pH at the rate of 7,34. Analysis of gas formula of blood showed hypercapnia. Urine analysis revealed an acidity increase.

+What form of acid-base disbalance is the case? (2012)

Gaseous acidosis

Secretory alkalosis

Gaseous alkalosis

Non-gaseous alkalosis

Non-gaseous acidosis

A 70-year-old patient has been found to have atherosclerosis of heart and brain vessels. Examination revealed the changes in the lipid profile. Pathogenesis of atherosclerosis is greatly influenced by an increase in the following lipoproteins rate: (2012)

+Low-density lipoprotein

Very-low-density lipoproteins

Intermediate-density lipoproteins

High-density lipoprotein

Chylomicrons

After eating strawberries a child presented with itchy red spots on the skin (hives). According to the classification of Coombs and Jell this reaction relates to the following type of allergic reactions: (2012)

+Reagin (anaphylactic)

Cytotoxic

Immunocomplex

Cell-mediated

Stimulating

A patient was found to have an increased blood serum LDH-1 activity. In which organ is the pathological process localized? (2012)

+Heart

Liver

Kidneys

Stomach

Muscles

A man who had been struck in the epigastric region had a heart arrest. What caused such changes in the cardiac activity? (2012)

+Increased vagal tonus

Adrenaline release

Increased sympathetic tonus

Angiotensin II release

Histamine release

A patient has developed an attack of bronchial asthma: he has laboured respiration with the frequency of 24-26/min., inspirations take turns with prolonged expirations involving participation of expiratory muscles. What form of respiratory failure has developed in the patient? (2012)

+Expiratory dyspnea

Cheyne-Stokes

Biot's

Inspiratory dyspnea

Apneustic respiration

A 58-year-old male patient was found to have a peripheral circulation disorder with a restricted arterial inflow, paleness of the respective region, drop of partial oxygen pressure in it. This disorder is called: (2012)

+Ischemia

Arterial hyperemia

Thrombosis

Venostasis

Reperfusion syndrome

A male received a radiation dose of 30 Gy. He presents with necrotic angina, disorders of the gastrointestinal tract. Blood tests revealed anemia, leukopenia and thrombocytopenia. What period of acute radiation sickness is observed in the patient? (2012)

+Height of disease

Primary reactions

Imaginary wellbeing

End of disease