A 39-years-old patient has been suffering from gastric ulcer for last 4 years. Pain in epigastric region, heartburn, nausea, and constipation appear mainly in autumn and spring. Name this condition.

Acute period

Remission

Complication

Pathologic condition

Relapse

Gasping respiration appears in a patient with severe lung pathology. What terminal condition is this characteristic for?

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Clinical death

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The main link in pathogenesis of kinetosis under radial acceleration is:

Excitation of motor nuclei of vagus nerve

Irritation of tactile receptors

Increase in muscular tone

Irritation of nuclei of vestibular nerve

Bradycardia

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Latent period

Period of contact

Period of manifestation

Final period

Increase in pulse rate, respiratory rate, and increase of BP were noticed on a height of 1000 m above the sea in a 25-years-old woman, coming for holyday at

mountainous resort. In some time all those symptoms disappeared. Which process was noticed in a woman?

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Compensation

Decompensation

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Parabiosis

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What is the typical pathological process?

allergy

anemia

hepatitis

spikes

scar

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Explosive decompression syndrome

Hypoxia

Gas embolism

Toxic influence of gases dissolved in the blood

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High altitude diseases

Hyperbaric oxygenation

Lowering of reactivity

Compensatory adaptation

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A 49-year-old man was suffering 12 years ago from rheumatic myocarditis, endocarditis, and insufficiency of mitral valve. Examinations showed the absence of inflammatory process, sufficient minute blood volume. What is it?

Pathological condition

Pathological process

Typical pathological process

Compensatory reaction

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Three chromosomes of 21st pair were revealed in a baby by karyotyping. Mark the phenotypic manifestation or this mutation

Down's syndrome

Edward’s syndrome

Patau's syndrome

Turner's syndrome

Polisomia Y-syndrome

Test of amniotic fluid for determination of sexual chromatin showed that fetus's cells include 2 bodies of sexual chromatin (Bar's bodies). Which disease was revealed in the fetus?

Trisomy X-syndrome

Patau's syndrome

Down's syndrome

Edward’s syndrome

Klineftlter's syndrome

A 20-year-old man complains of headache, failing sight, muscular weakness. His height is 2.00 m, weight is 80 kg, he has long extremities, and kyphosis. On X-ray examination the skull film showed enlargement of Turkish saddle. Sexual chromatin is absent. What pathway is the most possible in appearance of gigantism in the young man?

Excess of growth hormone.

Somatoliberin insufficiency

Gonadoliberin insufficiency

Testosterone insufficiency

Chromosomal mutation

A woman addressed to the medical-senetic consultation. Short neck with wing-shaped skin folds ("sphinks's neck"), broad chest, and mammary hypoplasia were revealed in her on examination. What is the most possible diagnosis?

Turner's synrome

Syndrome of "cat's cry"

Patau's syndrome

Morris's syndrome

Klinefelter's syndrome

A child being born in late marriage has short stature, mental retardation, thick geographic tongue, narrow palpebral fissures, and flat broad face. What disturbance underlies development of described syndrome?

Hereditary chromosomal pathology

Birth injury

Intrauterine intoxication

Intrauterine infection

Intrauterine immunoincompatible

Mother's karyotype has 45 chromosomes. There was revealed that it connects with translocation of the 21st chromosome to the 15th one. Which disease more possible would develop in her child if the father’s karyotype is normal?

Down’s syndrome

Patau’s syndrome

Klinefelter’s syndrome

Morris's syndrome

Edward's syndrome

A child with hereditary defects manifested characteristic syndrome named "cat's cry" just after the birth. At that newborns have "meowing" timbre of their voice. In examination of the karyotype of this child following was revealed:

Deletion of segment of 5th chromosome

Additional 21st chromosome

Additional Y-chromosome

Additional X-chromosome

Lack of X-chromosome

A woman addressed to the hospital with complaints of suppurating incised wound. A doctor was cleaning the wound surface with 3% solution of H_2O_2. But foam did not form. What does absence of preparation activity connected with?

Hereditary insufficiency of katalase

Low concentration of H_2O_2

Superficial wound

Hereditary insufficiency of erythrocyte phosphatdehydrogenase

Presence of pus in the wound

Sexual chromatin was revealed at examination of the buccal epithelium of a man. Which chromosomal disease is characterized by this symptom?

Klinefelter's syndrome

Trisomy X-chromosome

Turner's syndrome

Hypophosphatemic rickets

Down's disease

A 10-month old baby has fair hair, very white skin and blue eyes. His parents have dark hair. He had normal appearance, but during last three months impairment of

cerebral circulation and mental retardation developed in him. The reason for such condition can be:

Phenylketonuria

Acute porphyry

Hystidinemia

Lactosemia

Glycogenose

Daltonism (color blindness) was revealed in a 7-years-old boy at examination. His parents are healthy. But his mother's father had the same anomaly. Which is the type of inheritance of this anomaly?

X-linked recessive

Autosomal dominant

X-linked dominant

Autosomal recessive

Partial dominance

Two types of cells with chromosomal set 46XY and 47XXY in the equal quantity were revealed at examination of karyotype of the patient. What is the most possible diagnosis?

Kleinefelter's syndrome

Down's syndrome

Normal karyotype

X-syndrome monosomia

Patau's syndrome

A 14-years old girl has short stature, absence of pubescence, very short neck, broad shoulders, and normal intelligence. What disease does the girl have?

Turner's syndrome

Patau's syndrome

Edward's syndrome

Down's syndrome

Klinefelter's syndrome

A 5-year old girl's karyotype has 46 chromosomes. But one chromosome of the 15th pair is longer than normal one, since it joins chromosome from 21st pair. What type of mutation is present in the girl?

Duplication

Deletion

Inversion

Shortage

Translocation

The father of a pregnant woman suffers from hemeralopia. This is an X-linked recessive disorder. Her husband's relatives didn't suffer from this disease. What is possibility that her child will suffer from hemeralopia, if it is a boy?

50%

0%

75%

100%

25%

Elementary discrete unit of inheritance in both sexual and asexual reproduction is:

One gene

One chain of DNA molecule

One pair of nucleotide

Two chains of DNA molecule

One nucleotide

A 12-years-old boy has lower jaw carcinoma. What type of mutation underlies the tumor development?

Non-lethal mutation of somatic cell

Lethal mutation of somatic cell

Non-lethal mutation of sexual cell mother or father

Non-lethal mutation of somatic cell in embryogenesis

Lethal mutation of somatic cell in embryogenesis

Child was born with hereditary pathology - cleft palate. What type of mutation underlies this pathology?

Non-lethal mutation of somatic cell in embryogenesis

Non-lethal mutation of somatic cell

Lethal mutation of somatic cell

Non-lethal mutation of sexual cell mother or father

Lethal mutation of somatic cell in embryogenesis

A 10-years-old boy with mental retardation has typical appearance: small head with chamfered nape, oblique slant of palpebral fissures, low-bridged nose, and half-open mouth. A doctor is keeping him under observation in connection with congenital heart disease. What violation of karyotype causes the pathology in this boy?

Trisomy of 21 pare of chromosome

Trisomy of 13 pare of chromosome

Trisomy of 18 pare of chromosome

Trisomy X

Monosomy of X-chromosome

A 25-years-old man complains of sterility, lie is tall; he has asthenic body build and decrease in intelligence. Bar's bodies were revealed in biopsy of his buccal epithelium. What pathology it may be?

Klinefelter’s syndrome

Adipopse-genital dystrophy

Acromegaly

Adrenogenital syndrome

Eunohoidism

Few drops of 5% solution of trichloroacetic iron were added to urine of a newborn. Color of urine did not change. Phenylketonuria with irreversible brain injury was diagnosed in this child at the age of two. Why was not phenylketonuria diagnosed in this newborn?

Wrong time was chosen

Wrong substrate was chosen

Analytic mistake was made

Reagent was prepared incorrectly

Wrong interpretation of results

Discharge of milk from nose was observed in a newborn during first feeding. Which inborn defect of oral cavity can cause such condition?

Cleft palate

Absence of soft palate

Splitting of alveolar bone

Harelip

This is normal occurrence

A patient is short; he has mental retardation, epicanthic folds, and short fingers. The trisomy of 21st pare of chromosome has been revealed in his karyotype. How is this chromosomal anomaly referred to?

Down's syndrome

Klinefelter's syndrome

Turner's syndrome

Trisomy X-syndrome

Specific fetopathy

In the second half of pregnancy a woman has disorders of blood circulation in placenta with violation of all its functions: respiratory, trophic, protective, excretory, and hormonogenic. This has led to development of secondary placental insufficiency syndrome. Which pathologic process can develop in such conditions?

Fetopathy

Blastopathy

Embriopathy

Gametopathy

Galactosemia

A patient was exposed to ionizing radiation by accident. It has led to development of deletion – a loss of chromosome segment. How is this pathologic happening referred to?

Mutation

Exudation

Alteration

Enzymopathy

Reparation

Mutation, inversion of one chromosome, has developed in a patient as a consequence of ionizing radiation influence. How is pathogenic factor called, which evoked these pathologic changes?

Physical mutagen

Chemical mutagen

Biological mutagens

Carcinogen

Virus

A patient has mutation of gene which is responsible for hemoglobin synthesis. It has lead to development of sickle-cell anemia. What kind of pathological hemoglobin is found out this case?

Hb S

Hb A1

Hb F

Hb A

Bart-Hb

A patient has pathological processes resulted from X-linked gene mutation. This disease is accompanied by deficiency of VIII factor of blood coagulation and prolongation of blood coagulation time to 25 min. What is this disease?

Hemophilia

Glaucoma

Hemeralopia

Daltonism

Galactosemia

A teenager has asthenic body build, gynecomastia, and testicular atrophy. For verification of diagnosis he was sent to medical-genetic consulting room. What karyotype will be found out in this case?

47 XXY, one Bar's body

47 XXY, two Bar's bodies

46 XY, Bar's bodies are absent

45 XO, Bar's bodies are absent

47 XXX, two Bar's body

A patient in comatose state has smell of acetone from his mouth. Content of glucose in his blood plasma is of 18 mmol/L. What kind of coma is the most possible one in this case?

Ketoacidemic

Hyperosmolar

Hypoglycemic

Toxic

Lactatacidemic

A patient with crushed muscular tissue was admitted to the traumatological department.Which biochemical index of urine is increased in this case?

Creatinin

Glucose

Mineral salts

Uric acid

General lipids

A patient is drowsy, his conscious is depressed, and his reactions to irritants are suspended. He has a pale dry and edematous skin, muscular fibrillations,

mydriasis, and Cheyne-Stocks' respiration with ammonium scent from his mouth. Pericardial friction sound was found at auscultation of the patient's heart. What kind of coma has developed in this patient?

Renal

Ketoacidotic

Hyperosmolar

Hepatic

Apoplectic

Spasm of resistant vessels develops in /ones with alpha-adrenoreceptors in erectile phase of shock. What hemodynamic changes will be observed in this case?

Systemic decrease of peripheral blood flow

Centralization of blood flow

Bradycardia

Decrease of venous return

Decrease of blood flow speed

A patient was admitted to the hospital in severe state. He does not answer the questions and docs not react to pain stimuli. Patient's BP is 50'10 mmHg, his pulse is 50 per min. What are the reasons for disorders of system hemodynamics at torpid phase of shock?

Total decrease in peripheral vascular resistance

Elevation of venous return of blood

Increase of CBV

Rise of tonicity of sympathetic nervous system

Decrease in permeability of exchange vessels

Levels of plasma proteins are sharply increasing, and the number of alveolar macrophages and lymphocytes is decreasing in bronchoalveolar contents of a patient with shock. What is the mechanism of these phenomena appearance ?

Increase in permeability of lung capillaries

Spasm of resistant vessels of the lungs

Increase in inhibitor systems of the lungs

Increase in pulmonary blood flow

Hyperventilation

A patient with torn away linger was admitted to the traumatological department lie is fussy, verbose, and pale. His pulse is 120 beats per minute. BP 140/90 mmHg. What are the peculiarities of disorders of microcirculation and systemic hemodynamics in erectile phase of shock?

Increase in systemic peripheral resistance

Systemic spasm of volume vessels

Decrease in venous return and volume of blood circulation

Increase m peripheral resistance in the brain, heart and lungs vessels

Hypoxia in /.ones with beta-adrenoreceptors

Tourniquet was applied to upper third of hip of wounded driver just at place of car accident. The patient was admitted to a surgical department in satisfactory condition 3 hours later. Marked edema of hip tissues, frequent pulse, cold perspiration, and expressed hypotension develop in the patient after removal of tourniquet. Which pathological process develops in the patient?

Toxic shock

Anaphylactic shock

Collapse

Cardiogenic shock

Hemorrhagic shock

Daily diuresis amounts to 250 ml in a patient with anaphylactic shock. The patient has moist rales in his lungs; his consciousness is intact In patient's blood acidosis reveals with base deficiency of 14.5 mmol/L; plasma contents of potassium is 8.8 mmol/L and urea is 48 mmol/L. How is this disorder of kidney called?

Acute renal failure

Uremic coma

Acute diffuse glomerulonephritis

Chronic renal failure

Chronic glomerulonephritis

Sharp weakness, paleness of skin, lost of consciousness appeared in a patient the next day after resection of Ins stomach The patient's BE is 70/40 mmHg, pulse is 160 beats per minute In the patient's blood test lib is 70 g/l, erythrocytes arc 2.3xl0l2/L. What pathology appeared m a patient?

Hemorrhagic collapse

Orthostatic collapse

Pain shock

Traumatic shock

Cardiogenic collapse

Sharp decrease of systolic BP down to 60 mmHg tachycardia of 140 beats per minute, dyspnea, and loss of consciousness developed in a patient on the second day after myocardial infarction What pathways have the most important significance in pathogenesis of this shock"

Decrease in stroke volume

Increase m excitability of the myocardium by products of necrotic decay

Decrease in blood volume

Development of paroxysmal tachycardia

Development of anaphylactic reaction to myocardial proteins

A driver was admitted to an emergency department alter a car accident lie does not react to questions; he is indifferent to everything, pale; he has shallow and infrequent respiration and BP of 75/50 mmHg. Name the principal link in pathogenesis of this pathology.

Inhibition of CNS

Excitement of CNS

Loss of blood

Toxemia

Redistribution of blood

To compensate considerable loss of blood resulting from knife wounding of liver, a 30-ycr-old patient with blood of IV (AB) Rh (-) group was transfused with blood of 1V(AB) Rh (+) group Requirement in repeated blood transfusion appears in several days. What kind of blood is it possible to use for transfusion?

IV(AB) Rh (-)

I(O) Rh (+)

11(A) Rh (-)

IV(AB) Rh (+)

lll(B)Rh(-)

A patient was admitted to a hospital with acute high bowel obstruction lie had prolonged vomiting and blood pressure decreased down to 60/40 mmHg. Which mechanism of shock development is principal one in this case?

Hypovolemia

Exhaustion of arteriolar alpha-adrenoreactivity

Acidotic dilation of metarteriols

Loss of chlorides

Increase in tonus of vagus nerve

Novocain solution was injected to a patient for anesthetization at extraction of a carious tooth drop of BP. loss of consciousness, dyspnea, and convulsions develop in the patient in a few minutes What is the reason for anaphylactic shock development?

Sensitization to Novocain

Desensitization of the organism

Toxic action of Novocain

Autoallergic state

Para-allergy

Severe burn shock has developed in a patient with 40% of body surface burnt. What is the cause of shock development?

Pain

Dehydration of the organism

Mineral metabolism disturbances

Autoimmunization of the organism

Protein metabolism disturbances

A teeth was extracted in a teenager with Novocain utilization. Paleness of skin, dyspnea, and hypotension developed in the teenager 10 minutes later. What kind of allergic reactions developed in the teenager?

Cytotoxic

Immune complex

Stimulating

Anaphylactic

Cell-mediated

After a car accident a patient has BP of 70/40 mmHg; he is unconscious; his daily diuresis is about 300 ml. What is the mechanism of urinopoiesis disturbances in this case?

Decrease in glomerular filtration

Augmentation of glomerular filtration

Reduction of tubular reabsorption

Augmentation of tubular reabsorption

Reduction of tubular secretion

A 45-year-old victim with severe craniocerebral trauma was admitted to the hospital by emergency team. Shockogenic trauma was diagnosed: loss of consciousness, paleness of skin, decrease in body temperature down to 35°C, decrease in muscular tonus, absence of reflexes, frequent and weak pulse, and decrease in BP down to 50/30 mmHg appeared in the patient. Which clinic stage of traumatic shock is the patient in?

Terminal

Erectile

Excitation

Inhibition

Torpid

A doctor established shock condition in a patient who fell from high altitude. What is the most important in traumatic shock development?

Disturbances of the neurohumoral regulation

Toxemia

Disorders of regulation of the hemodynamics

Hypovolemia

Disturbances of renal functions

Traumatic shock developed in a patient as a result of severe trauma neuroendocrine, hemodynamic, and metabolic disorders took place during the shock development. Clinically, after erectile stage of shock, another stage developed, which is referred to as:

Septic

Torpid

Chronic

Neurocirculatory

Ischemic

Anaphylactic shock developed in a patient after injection of local anesthetic drug. Which mechanism of blood circulation disorders is the leading one in this condition?

Decrease in tonus of vessels

Hypovolemia

Pain

Activation of sympathetic-adrenal system

Reduction of contractile function of the heart

A 35-year-old man has massive trauma of lower 1 extremities without considerable external bleeding. The victim is in exited condition. What component of pathogenesis of traumatic shock is leading and needs immediate correction?

Pain

Internal bleeding

Intoxication

Disorder of organ functions

Internal loss of plasma

A worker of radiological department was exposed to radiation once as result of violation of the rules of safety appliances. Ulcerogangrenous stomatitis developed in him in 8 days. Patient's blood test showed RBC 3.2 x 10.12/L. reticulocytes - 0.01% Hb 60 g/L, WBC 2.3 x 10.9/L., and platelets - 50 x 10.9/L . Which period of radiation sickness are described changes typical for ?

Period of manifestation

Period of primary reactions

Latent period

Pretended well-being period

Outcomes

At violation of the rules of safety appliances an electric welder took electric wire by unprotected and wet hand. Tonic contractions of muscles and involuntary urination developed in him. Which effect of electric current becomes apparent in this case?

Biological

Electrochemical

Heat

Mechanical

No correct answer

During long hypothermia of the organism phase of decompensation developed. Its feature is:

Decrease in blood pressure

Constriction of peripheral vessels

Rare respiration

Increase in muscle tone

Rigor

A man took electric wire with high tension by both hands. He died momentary in result of:

Cardiac fibrillation

Intracerebral bleeding

Respiratory standstill

Burns

Tearing extremities off

The main link in pathogenesis of kinetosis under radial acceleration is:

Irritation of nuclei of vestibular nerve

Excitation of motor nuclei of vagus nerve

Irritation of tactile receptors

Increase in muscular tone

Bradycardia

A worker, taking part in nuclear power plant breakdown elimination, was exposed to whole-body irradiation. Which organ or which tissue will tumor develop in?

Bone marrow

Lung

Stomach

Skin

Bone tissue

A man had electric trauma. Current went through the myocardium. What dangerous disorders in heart work needing emergency correction can appear in such situation?

Fibrillation of ventricles

Fibrillation of atria

Bradycardia

Tachycardia

Extrasystolia

A worker was exposed to ionizing radiation in dose of 5Gr after accident at nuclear power plant. Agranulocytosis was revealed in him in a week. What is the basic pathogenic mechanism in this case?

Oppression of leucopoiesis

Increased outcome of mature leukocytes from bone marrow

Development of autoimmune processes

Increase in migration of granulocytes to tissues

Elevated destruction of leukocytes

A patient has bone marrow form of radiation diseases. What lineages of hemopoiesis are affected in this case?

All

Erythrocytic

Megakariocytic

Granulocytic

Agranulocytic

Symptoms of hemorrhage syndrome appeared in a patient with radiation sickness. Which mechanism is leading one in pathogenesis of this syndrome?

Thrombocytopenia

Lymphopenia

Erythropcnia

Eosinopenia

Neutropenia

A doctor revealed in a patient affected by electric current respiratory arrest and disturbances of heart functions. What pathway did electric current go in this case?

Right hand - head

Left leg - right leg

Right leg - right hand

Left leg - right hand

Abdomen - right leg

Diver, working at depth of 60m, was raised very quickly on surface after an accident. After a time pain in the joints, skin itching appeared in him. What happened to diver?

Decompression diseases

High altitude diseases

Hyperbaric oxygenation

Lowering of reactivity

Compensatory adaptation

A galvanizer addressed to a doctor because of appearing of pink itching spots and vesicles on his arms skin. He worked a lot with nickel compounds recently. What is the mechanism of these lesions development?

Modification of skin proteins due to action of nickel ions with immunopathological reaction development

Irritant action of nickel compounds on skin

Vegetative disorders related to nickel compounds received by respiratory tract

Infection of skin due to microtraumas

Nickel is a complete antigen

In consequence of accident in laboratory man was exposed to radiation in dose of 6Gr. Which symptom is the most typical for latent period of acute radiation diseases?

Leukocytopenia

Headache

Depression

Vomiting

Diarrhea

A patient was admitted to the hospital with extensive burns of the body surface. Which pathogenic factor of burn disease has to be liquidated in the first turn?

Pain

Intoxication of decay products

Plasma loss

Infection through the injured skin

Autoallergy

During running parallel experiments rats were exposed to prolonged direct solar radiation in open chambers and in ones covered by glass. Tumor development at hair uncovered places of skin was marked in animals residing in open chambers. Which factor influence does this phenomena connected to?

Ultraviolet radiation

Sun heat

Biologic carcinogens

Exogenous chemical carcinogens

Infrared radiation

In consequence of accident at nuclear power plant radio-active products escape occurred. Peoples, who were in zone of increased radiation, got dose of radiation about 250 - 300 Gr. What symptom would be the leading one in these people?

Neutropenia

Lymphocytosis

Anemia

Thrombocytopenia.

Leukocytosis

A man was admitted to the hospital after exposure to radiation in dose of 3Gr. Which physiological system develops changes in the first turn in this patient?

Blood system

Cardiovascular system

Immune system

Alimentary' system

Endocrine system

Headache, pain in ears, nasal hemorrhages appeared in the passengers during flight by balloon. What serves the pathogenic base for these changes development?

Decompression syndrome

Explosive decompression syndrome

Hypoxia

Gas embolism

Toxic influence of gases dissolved in the blood

What is the reason for pneumonia development in children after cooling?

Microorganisms

General cooling

Decrease in reactivity due to previous diseases

Insufficiency of nutrition

All these factors

Which changes are connected to direct injurious action of ionizing radiation?

Injury of chromosomes

Inhibition of DNA-synthesis under the influence of radiotoxines

Radiolysis of water

Edema

Interaction between free radicals and enzymes

What reasons does high radiosensitivity of cells and tissues depend on?

High mitotic activity

Activation of glycolysis

Level of differentiation

Number of mitochondrias

Decrease of DNA-synthesis

Which changes in blood are typical for the first period of bone marrow form of acute radiation diseases?

Leukocytosis

Agranulocytosis

Thrombocytopenia

Erithrocytopcnia

Leukocytopenia

Among many factors determining severity of electrical injury the first place belongs to injury of internal organs localized at the way which electric current passes through the body. Which organ injury is the most dangerous?

Heart

Cerebrum

Lungs

Liver

Kidneys

A patient with III - IV degree bums of 50% of the body surface was admitted to the hospital. He has depressed consciousness, bradycardia, and reduced blood pressure. What is the most possible diagnosis?

Burn shock

Intoxication

Preagony

Collapse

Coma

A patient very often has diseases of nasopharynx, which appear under the influence of different factors and in the most cases manifest by inflammation. Which of listed factors is the most probable reason for these diseases?

Microorganisms

General cooling of organism

Overstrain

Immunodeficiency

Insufficiency of nutrition

There are such stages of hyperthermia as:

Compensatory,decompensatory

Erectil; torpid;

Compensatory,subcompensatory;

Decompensatory,subcompensatory;

No correct answer

The temperature during the decompensatory stage of hypothermia:

Falls;

Rises:

Doesn't change;

May rise or fall;

No correct answer

An exposure to high temperature provides such local changes as:

Burns;

Burn disease;

Heat exhaustion;

Heat edema;

All answers are correct

First degree bum is characterized by:

All answers are correct

Mild inflammation;

Pain;

Moistening of the burnt surface;

Hyperemia;

Third degree bum is characterized by:

Massive swelling;

Blisters;

Pain;

Hyperemia;

Carbonization

Fourth degree burn is characterized by;

Carbonization;

Pain;

Blisters;

Hyperemia;

Massive swelling

The main sign of the second period of hyperthermia in decompensatory stage is;

The rise of temperature;

The fall of temperature;

lnflammation;

General overheating;

All answers are correct;

The main sign of the second period of hyperthermia in decompensatory stage is;

The rise of temperature

General overheating;

Inflammation

The fall of temperature;

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Burns

Heat edema:

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Heat exhaustion;

All answers are correct

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Falls;

Rises;

Doesn’t change;

May rise or fall;

No correct answer

What systemic disturbances are caused by bums:

B,C are correct

Burnshock:

Hyperemia;

Burn toxemia:

All answers are correct;

There are such stages of hyperthermia as:

Compensatory, decompensatory;

Decompensatory, subcompensatory;

Compensatory, subcompensatory;

Erectil, torpid;

No correct answer;

First degree burn is characterized by:

All answers are correct;

Hyperemia;

Mild Inflammation;

Pain;

Moistening of the burnt surface;

Third degree burn is characterized by:

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Blisters;

Hyperemia;

Pain;

Carbonization

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Falls;

Rises;

Doesn’t change;

May rise or fall;

No correct answer

Hippocrate described such types of temperament as:

Choleric, phlegmatic, sanguine, melancholic;

Asthenic, athletic, picknic;

Reasonic type. artistic, mix type;

Asthenic, pastly, fibrotic, lipomatic;

None of them.

The constitution is:

An unified complex of morphological, functional peculiarities being formed on the hereditary;

Enzyme deficiency;

Disorders of lipid metabolism;

Cupper accumulation;

None of them.

The classification of Kretschmer include:

Asthenic, athletic, picknic;

Choleric, phlegmatic, sanguine, melancholic

Reasonic type, artistic, mix type;

Asthenic, pastly, fibrotic, lipomatic; factors;

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In the second half of pregnancy a woman has disorders of blood circulation in placenta with violation of all its functions: respiratory, trophic, protective. excretory. and hormonogenic. This has led to development of secondary placental insufficiency syndrome. Which pathologic process can develop in such conditions?

Fetopathy

Gametopathy

Blastopathy

Embriopathy

Galactosemia.

The diathesis is:

Abnormality of constitution which is characterized by pathological reactions on physiological agent;

An unified complex of morphological, functional peculiarities being formed on the hereditary;

Enzyme deficiency;

Disorders of lipid metabolism;

Cupper accumulation.

The classification of diathesis include:

All of them.

Hemorrhagic;

Thymico-lymphatie;

Edematic;

Asthenic;

Neuro-arthritic diathesis:

Is predisposing to arthralgia, arthritis, rheumatism, gaut;

Expressed in hypodynamia, hypotonia;

Characterized by edema reaction;

Characterized by hemorrhagic reaction to physiological factors;

None of them.

The constitution is:

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Fetopathy

Gametopathy

Blastopathy

Embriopathy

Galactosemia

There are no reactions of delayed type hypersensitivity in mice without hairs (nude mice). The most possible reason for this pathology is:

Absence of thymus

Defect of phagocytosis

Disorders of hematopoiesis

Deficiency of components of complement system

Absence of gamma globulins in blood

Transplantation of skin was performed in a patient with wide spread burns. Grafl swelled and changed its color at 8th day and was rejected at llth. What cells participate in this process?

T-lymphocytes

Erythrocytes

Basophils

Eosinophils

B-lymphocytes

Deficient content of immunoglobulins was revealed in a patient What cells of immune system produce immmunoglobulins?

Plasma cells

T-killers

B-lymphocytes

T-helpers

T-suppressors

Three times immunization of population was carried out by pertussis-diphtheria-tetanus vaccine when the number of diphtheria cases rose. The levels of anybodies increased in the blood of immunized people as a consequence of immunization. What cells produce these proteins?

Plasmocytes

Acidophilic granulocytes

Neutrophilic granulocytes

Macrophages

Monocytes

It is known that plasma cells produce specific antibodies against the given antigen. Number of plasma cells increases after introduction of antigen. What cells of peripheral blood serve as precursors of plasma cells?

B-lymphocytes

Neutrophils

Basophils

T-lymphocytes

Eosinophils

Formation of T-helpers is held up in thymus. What processes of immunogenesis in connective tissue will be violated at first?

Conversion of B-lymphocytes to plasma cells

Phagocytosis of antigens by macrophages

Opsonization

Phagocytosis of foreign entities

Formation of precursors of T-lymphocytes

Transplantation of donor heart was performed in a patient. What conditions have to be observed to prevent transplant rejection?

Selection of donor according to HLA

Transplantation of bone marrow

Transfusion of donor‘s blood

Removal of spleen

Administration of immunomodulators

A patient was operated for acute purulent appendicitis. He cannot be discharged from the hospital for a long time because of bed healing of post-operative wound. He has diabetes mellitus for many years, repeated pyodermia, furunculosis, stomatitis, and gingivitis. What is the reason for decreased immunologic reactivity?

Protein metabolism violation

Hyperglycemia

Hypercholesterolemia

Hyperketonemia

Hypohydration

It is known that reactivity of the organism is opposite to its resistance during some pathological processes. What pathological process can appear in such situation?

Shock

Fever

Inflammation

Posthemorrhage anemia

Arterial hypertension

Macrophages surrounded with alien erythrocytes were found at microscopic examination of smear of exudation took from a rat suffering from aseptic peritonitis with addition of bird erythrocytes. What stage of phagocytosis does this occurrence correspond to?

Adhesion

Incomplete phagocytosis

Hemotaxis

Engulfment

Intracellular digestion

A 3-year-old boy suffering from chronic pneumonia has low indices of B-lymphocyte system. Bruton's hypogammaglobulinemia was diagnosed in him. What is the consequence of B-lymphocyte system deficiency?

Decreased resistance of organism to pyogenic coccus flora

Decreased resistance of organism to viruses

Decreased resistance of organism to fungous and tuberculosis infection

Absence of graft rejection reactions increased risk of tumor development in

organism

Considerable edema of lips appeared in a 25-year-old man in dentist‘s oflice few minutes later washing his mouth with solution of furacillin. Which type of allergic reaction is observed in this case?

Anaphylactic

Immune complex-mediated

Delayed-type hypersensitivity

Stimulating

Cytotoxic

Child has congenital heart disease, face defect, absence of thyroid gland and thymus, and T-lymphocytes in blood. What hereditary pathology are these symptoms connected with?

Di George syndrome

Luis-Barr syndrome

Turner’s syndrome

Dawn’s disease

Bruton’s disease

A patient with thyrotoxicosis has antithyroid antibodies in his blood. Which type of allergic reactions is observed in this case?

Stimulating

Cytotoxic

Delayed-type hypersensitivity

Anaphylactic

Immune complex-mediated

A 2-month-old girl with pneumonia was admitted to pediatric department. She bore otitis and pneumonia a month ago. Dicrease in levels of gamma-globulins by 2 times was found at her examination. Which disorder of immune system is it?

Physiological hypogammaglobulinemia

Lui-Barr syndrome

Late hypogammaglobulinemia

Swiss type of immune deficiency

Di George syndrome

A 2-year-old boy has frequent bacterial infections since 2 months. Allergic reaction to tuberculin (IV type) is positive. Which immunodeficiency is more possible at this patient?

Congenital B-lymphocytes insufficiency

Congenital T-lymphocytes insufficiency

Congenital T-suppressors defect

Congenital total immunodeficiency

Acquired immunodeficiency

Association of staphylococcus aureus and staphylococcus epidennidis are found in numerous skin pustules at 25-year-old patient. Pneumocystacarinia is found in his sputum analysis. Cryptosporidia, proteus vulgaris and fungi of candida genus are found in his stool. Which disease is accompanied by such multiple infections with conditionally-pathogenic microorganisms?

AIDS

Dysbacteriosis

Sepsis

Diabetes mellitus

Drag agranulocytosis

A 25-year-old man complains of frequent inflammation diseases of different localization. lie is injection drug addict. HIV-test was positive at him. What types of cells are damaged more substantially in case of HIV?

T-helpers

Neutrophilic granulocytes

Plasmocytes

Macrofages

NK-cells

A l2-year-old boy with hereditary disease has eczema, 4 cases of pneumonia in his anamnesis, bleedings. Low level of T-lymphocytes. Decreased levels of lgM. normal levels of lgA was found in his blood. What disease does the boy have?

Wiskott-Aldrich syndrome

Luis-Barr syndrome

Bruton's disease

Late hypogammaglobulinemia

Early hypogammaglobulinemia

A newborn has recurring respiratory tract diseases, pustule affections of the skin. severe clinical course of herpes infection and recurring candidiasis (thrush). Inoculation against smallpox and BCO-vaccination was accompanied by severe complication in him. All classes of immunoglobulins were decreased in his immunological test. Delayed-type hypersensitivity reactions were absent in him. What cells insufficiency underlies this immunodeficiency syndrome?

T- and B-lymphocytes

Neutrophiles

Macrophages

Fibroblasts

T-suppressors

Father has rhesus-positive erythrocytes and mother‘s blood is rhesus-negative. Severe hemolytic anemia has developed just after birth in their second child. What is the mechanism of massive hemolysis at newborn's organism?

Immune hemolysis

Toxemia of pregnancy

Antenatal intoxication

Antenatal infection

Genetic deficit of erythrocytes

A 1-year-old boy becomes very often ill with respiratory and pustular skin diseases. Even little damages become complicated by long-time purulent inflammation. All classes of immunoglobulins are nearly absent from the child’s blood. Contents of all leukocyte types and reactions of delayed-type hypersensitivity are normal. What cells inherited decrease in functional activity underlies this syndrome?

B-lymphocytes

T-lymphocytes

Neutrophils

Eosinophils

Endoteliocytes

Decrease in levels of lgG and particularly lgA, lgM was found during examination of immune status in 5-year-old boy. B-lymphocytes and plasma cells are absent from his blood and lymph nodes. Reactions of T-lymphocytes are normal. This is inherited sex-linked disease. What diagnosis is more possible?

Bruton’s disease

Luis-Barr syndrome

Wiskott-Aldrich syndrome

Swiss type of immunodeficiency

Early hypogammaglobulinemia

The reasons for disturbances of phagocytosis may be qualitative disorders of phagocytes. What changes of intracellular structures are more typical for “lazy leucocytes” syndrome?

Chemotaxin and opsonin receptors

Microfilaments

Specific membrane glycoprotein (GP 11O)

Microtubules

Bactericidal system

9-year-old girl was getting breast feeding during the first year of life. She suffered prolonged severe pneumonia in the end of the first year. She started walking late. Her gait was unsteady and her movements were discoordinated. Telangiectasia appeared in her skin and conjunctivas. lgA is absent from and levels of T-lymphocytes is decreased in her blood. What immunodeficiency disease does the girl have?

Luis-Barr syndrome

Wiskott-Aldrich syndrome

Chediak-Higashi syndrome

Swiss type of immunodeficiency

Di George syndrome

Immune system is depressed in a patient with HIV-infection. What cells damage contributes more to immunodeficiency at this patient?

T-helpers

T-suppressors

Macrophages

B-lymphocytes

T-killers

A 2-year-old patient suffering from chronic pneumonia has decrease in quantity of B-lymphocytes. lgM and lgG. What microorganisms can cause development of this disease?

Staphylococcus

Candidas

Mycobacterium tuberculosis

Herpes virus

Adenovirus

Disorder of cellular immunity was revealed during investigation of immune system in the patient with chronic fungus affection of the skin. What indexes decrease more typically in this case?

T-lymphocytes

lgG

lgE

B-lymphocytes

Plasma cells

Mantoux test was made to sick child on suspicion of tuberculosis. Swelling, hyperemia and painfulness occur in the allergen injection place in 24 hours. What components determinate this reaction of organism?

Mononuclear cells. T-lymphocytes and lymphokines

B-lymphocytes and lgM

Plasma cells, T-lymphocytes and lymphokines

Granulocytes, T-Iymphocytes and lgG

Macrophages, B-lymphocytcs and monocytes

A patient was suffering from chronic renal insufficiency. He has renal transplantation from donor, who died in motorcar accident. Donor had blood group same as recipient. Renal insufficiency occurs in patient again after a time. Which system incompatibility takes part in transplant rejection?

HLA

ABO

RH

MNS

Kel-Chelano

Pain in the heart and joints and pneumonia appeared in a patient three weeks later acute myocardial infarction. What is the main mechanism of development of post-infarction Dressler‘s syndrome?

Autoimmune inflammation

Ischemia of myocardium

Resorption of enzymes from necrotized area of myocardium

Secondary infection

Thrombosis of vessels

A patient addressed to a dentist with complaints of redness and edema of mucous membrane of his mouth a month later dental prosthesis. Allergic stomatitis was diagnosed in this patient. What type of allergic reaction by Gell and Coombs underlies this disease?

Delayed-type hypersensitivity

Cytotoxic

Immune complex-mediated

Anaphylactic

Stimulating

Anaphylactic shock developed in a patient with botulism alter second injection of antitoxic antibotulinus serum mixture. What is the main mechanism of anaphylaxis'?

Interaction of antigen with lgF.

Interaction of T-Iymphocytes with mediators

interaction of antigen with lgM

Interaction of macrophages with antigens

Interaction of T-lymphocytes with tissue basophils

ln a 27-years-old man tuberculin test was carried out. Following was observed 24 hours later: infiltration with size of 40x35 mm at the site of injection and hyperemia of skin above it. What group of biologic active substances causes development of allergic inflammation in this patient?

Lymphokines

Biogenic amines

Prostaglandins

Leukotriens

Kinins

Purulent endometritis developed in a woman after delivery. Treating with antibiotics - inhibitors of murein synthesis was ineffective. Wide spectrum bactericidal antibiotic was administered to her. 6 hours later temperature rapidly increased up to 40°C with shivering, pains in muscles appeared. BP dropped down

to 70/40 mmHg, and oligura developed in this woman. What is the main reason for this condition development?

Endotoxic shock

Toxic effect of preparation

Internal bleeding

Anaphylactic shock

Bacteremia

A 24-years-old patient has edema of face and increase in BP, which appeared 1.5 weeks later severe streptococcus tonsillitis. The patient has hematuria and proteinuria of 1.2 g/L. Anti-streptococcus antibodies and decrease in content of compliment system components were revealed in patient‘s blood Which microvcssels do deposits of immune complexes localize in and cause nephropathy?

Glomerule

Proximal tubules

Descendent tubules

Loop of Henle

Pyramids

Nausea, fatigue, stomachache, palpitation, diflicult respiration, and skin blisters developed in a patient 25 minutes later injection of antibiotics What stage of allergic reaction is observed in this patient?

Pathophysiological

Pathochemical

Biochemical

Immunological

Sensibilization

Skin tuberculin test was carried out in a patient with chronic lung tuberculosis. Local hyperemia and edema appeared in the site of inracutaneous introduction or tuberculin preparation within 24-48 hours. What cells are primary effectors in mechanism of this reaction?

T-lymphoeytes

Neutrophils

B-lymphoe

Eindotheliocytes

Smooth muscle cells of microvessels

Hyperemia, swelling and then necrosis of tissue, their rejection and ulcer (Arthus phenomenon) develop at the rabbit in the place of secondary intracutaneous injection of a substance with strongly pronounced antigenic properties (for example horse serum). What factors play the main role in pathogenesis of this phenomenon?

Antibodies presented by lgG and/or lgM

Antibodies presented by lgE

Antibodies presented by lgD

Antibodies presented by lgA

Specific T-lymphocytes-effectors

Skin rash, itching, swelling and pain in joints. Increase in body temperature, and proteinuria appeared in a patient in 5-8 days after use lots of medical serum. Serum sickness was diagnosed. What is the main factor in pathogenesis of this syndrome?

Primary systemic accumulation of circulating immune complexes in the blood

Primary systemic degranulation of mast cells in the organism

Primary systemic activation of T-killers

Primary systemic activation of endoteliocytes

Primary systemic cytolysis of blood cells

Allergic diagnostic tests are used for the diagnosis of many infectious diseases (tuberculosis, brucelosis, tularemia etc). Diagnosis is confirmed if papula and redness appear in the place of the allergen injection. Antigens interaction reaction is conditioned by:

T-lymphocytes and lymphokines

lgB and lymphokines

lgM and macrophages

lgB and T-lymphocytes

lgM and tissue basophiles

Catarrhal inflammation of bulbar conjunctiva and nose mucous membrane develop in patient every year in spring and early summer, when trees and flowers are in blossom. Production ol' specific antibodies to pollen underlies this syndrome. What cells activate and develop exocytosis in this syndrome?

Mast cells

Neutrophils

Macrophages

Lymphocytes

Throbocytes

An 18-year-old man with shoulder phlegmon got intramuscular injection of penicillin. Tachycardia. thread-like pulse; decrease in BP down to 80/60 mmHg occur after that. What kind of pharmacologic reaction develops?

Anaphylaxis

Potentiation

Reflex action

Central action

Peripheral action

Patient has been wearing removable dental prosthesis for 7 days. Swelling and hyperemia of prosthesis bed appear in the patient alter that.

Intoxication of organism by products of necrosis

Inflammation subsid

Decrease in mistance to microorganisms

Activation of saprophytic microflora

Release of myocardial enzymes to the blood

Thyrotoxicosis was diagnosed in a patient. Antithyroid antibodies were found in his blood. Which type of allergic reaction is observed at development of this disease?

Immune complex-mediated

Stimulating

Anaphylactic

Cytotoxic

Delayed type hypersensitivity

Hives, itching of the skin, swelling of the skin and mucous membranes, swelling of lymphatic nodes develop in the patient in 9 days after injection of medicinal serum. What disease develops?

Serum sickness

Pollinosis

Shwartzman's phenomenon

Overy phenomenon

Quinclte's edema

A 20-year-old man has injury of the right testicle. What danger does it brings for the left (healthy) testicle?

Mimicry of antigens and development of antibody-mediated damage

Development of infectious process

Development of atrophy

Development of hypertrophy

No danger

Guinea-pig‘s nephrocytotoxic serum was injected to the rabbit under the experiment. What human disease is modeled in this case?

Acute diffuse glomerulonephritis

Nephrotic syndrome

Acute pyelonephritis

Chronic renal insufficiency

Chronic pyelonephritis

Acute glomerulonephritis appeared in the patient 2 weeks later purulent tonsillitis. Antibodies against microorganism antigens were found at the patient. Which microorganism are these antibodies against?

Hemolytic streptococcus

Staphylococcus

Pneumococcus

Mycobacterium tuberculosis

Meningococcus

Severe edema of soft tissues of upper and lower jaws, rash on the skin of face. Redness, and itching appear in the patient in response to using anesthetic drag at tooth extraction. Which pathological process underlies the reaction to anesthetic?

Allergy

Inflammation

Drag toxic action

Insufficiency of blood circulation

Disorder of lymph outflow

Novocain was injected by dentist for anesthesia at tooth extraction. Symptoms of anaphylactic shock appeared at the patient few minutes later. Patient has drop of BP, tachypnea, loss of consciousness and convulsions. What type of reaction is it?

Immediate type hypersensitivity

Cytolytic or cytotoxic reactions

Arthus phenomenon reactions

Delayed type hypersensitivity

Stimulating allergic reaction

Man with the caries is subjected to constant sensitization by streptococcus antigen. What disease can appear due to this etiological factor?

Glomerulonephritis

Pancreatitis

Myocarditis

Pulpits

Periodontitis

Antitoxic diphtheria serum was introduced to a child suffering from diphtheria. Skin eruption accompanied by itching, increase in body temperature to 38°C and

pain in joints occurred in patient lo days later. What is the reason for these symptoms?

Serum sickness

Contact allergy

Atopy

Anaphylactic reaction

Delayed type hypersensitivity

Tuberculin was injected intraperitoneally to animal. which was sensitized by it. Venous hyperemia and peritoneal edema were revealed 24 hours later in laparotomy. High quantity of lymphocytes and monocytes were found in peritoneum smears. What pathological process docs the animal have?

Allergic inflammation

Fibrinous inflammation

Aseptic inflammation

Serous inflammation

Purulent inflammation

A dentist injected ultracain to a patient before tooth extraction for the purpose of anesthesia. Sensitivity test was not made. Anaphylactic shock developed in the patient in few minutes after drag injection. What cells produce regains, which take part in development of anaphylactic reaction?

Plasma cells

B-lymphocytes

T-lymphocytes

Mast cells

Basophils

Tooth was extracted in a teenager under Novocain anesthesia Paleness of skin, dyspnea and hypotension occurred in the patient ю minutes later. What type of allergic reaction is it?

Anaphylactic

Cytotoxic

Arthus phenomenon type

Delayed type hypersensitivity

Stimulating

Tooth was extracted in a teenager under Novocain anesthesia. Paleness of skin. dyspnea and hypotension occurred in the patient lo minutes later. What substance does allergen react with on the surface of mast cells?

lgF

T-lymphocytes

lgA

lgD

lgM

A 27-year-old woman instilled drops with penicillin to the eyes. Itching and burning pain of skin, edema of lips and eyelids, cough with whistling, decreasing in BP occur in her some minutes later. What immunoglobulin participates in development of these allergic reactions?

lgE

lgG and IgM

IgA

lgM

lgG

A patient was admitted to the hospital with diagnosis of acute left-ventricle heart failure. Patient's condition suddenly became worse and edema of lings developed in him. What kind of disorders of peripheral circulation causes the lungs edema?

Congestion (venous hyperemia)

Arterial hyperemia neurotonic type

Arterial hyperemia neuroparalytic type

Arterial hyperemia metabolic type

Ischemia

Dependence of blood pressure upon level of peripheral vascular resistance was measured in animal under experimental conditions. Indicate vessels, which the most resistance.

Arterioles

Capillaries

Arteries

Aorta

Veins

A patient has obstruction of right calf profound veins, which results in increasing in amount of blood in the impaired part of tissue. What is the name for increase in amount of blood resulted from impeded blood outflow?

Venous hyperemia (congestion)

Thrombosis

Ischemia

Stasis

Arterial (active) hyperemia

A patient with paradontosis has edema of gums. His gums are dark red. What kind of local blood flow disturbance takes place in patient's gums?

Venous (passive) hyperemia

Arterial (active) hyperemia

Embolism

Thrombosis

Ischemia

Pain in leg at walking, cyanosis, and edema of calf appeared in patient with varicosity. His foot is cold. What kind of disturbances of regional blood flow appeared in this patient?

Venous (passive) hyperemia

Angiospastic ischemia

Ischemic stasis

Compressive ischemia

Obsructive ischemia

Edema and cyanosis of low extremities apeear in a food shop assistant at the end of workday. What is the main factor of edema development in this patient?

Orthostatic increase of venous pressure

Dilatation of resistant vessels

Increase of number of functional capillaries

Increase of collateral blood flow

Increase of tissue drainage

Redness and increase in volume of affected place of tissue, and increase in local temperature are observed in a patient with burn of thigh. What pathologic process do indicated symptoms correspond to?

Arterial hyperemia

Venous hyperemia

Thrombosis

Ischemia

Stasis

A 23-year-old woman intense psychoemotional excitement. Hyperemia of face skin, tachycardia and increase in BP were observed in her. What is the mechanism of redness of her face skin?

Neurotonic arterial hyperemia

Congestive venous hyperemia

Neuroparalytic arterial hyperemia

Post-ischemic arterial hyperemia

Stasis

Dyspnea, sharp pain in the chest, cyanosis, and jugular venous distention suddenly develop in a patient with thrombophlebitis of lower extremities. What is the most possible disorder of blood circulation development in the patient?

Thromboembolism of pulmonary artery

Thromboembolism of coronary vessels

Thromboembolism of mesenteric vesel

Thromboembolism of cerebral vessels

Thromboembolism of portal vein

Burning in the mouth appears after talking of food with pungent dressings. At examination mucosa of oral cavity is edematous, hyperemic, and bright red. What major reasons underlie disorders of microcirculation?

Degranulation of tissue basophiles

Congestion

Neuroparalytic arterial hyperemia

Postischemic arterial hyperemia

Atonic hyperemia

A woman experienced a strong psycho-emotional excitement during dentist's reception. Redness of her face skin and profuse salivation were noticed at that time. What is the mechanism of these phenomena?

Neurotonic arterial hyperemia

Manifestation of sympathetonic effect

Stagnant venous hyperemia

Neuroparalytic arterial hyperemia

Postischemic arterial hyperemia

Patient's arm was put in plaster cast on account of simple fracture of humeral bone. Swelling, cyanosis, and decrease in temperature of the traumatized arm appear next day. What disorder of peripheral blood flow do these symptoms testify to?

Venous hyperemia

Thrombosis

Ischemia

Embolism

Arterial hyperemia

Injury of sympathetic fibers of the sciatic nerve developed in a patient due to trauma. What kind of peripheral blood flow disorder takes place in the patient?

Neuroparalytic arterial hyperemia

Neurotonic arterial hyperemia

Venous hyperemia

Angiospastic ischemia

Obturative ischemia

A 42-year-old woman, shop assistant by profession, complains of edema of the lower extremities at the end of a workday. Her legs are cyanotic, their temperature is decreased. Venous hyperemia of lower extremities was established, which is due to constitutional weakness of the elastic apparatus of veins and the occupation. What is the major pathogenetic factor causing local changes in venous hyperemia?

Hypoxia

Disorders of metabolism

Atrophy

Dystrophy

Sclerosis

Puncture of abdominal cavity for the extraction of fluid was perfomed to a 45-years-old patient with diagnosos "cirrhosis of liver, ascites". State of unconsciousness suddenly developed in the patient as a result of decrease in blood pressure after extraction of 5L of fluid.That was considered as a manifestation of brain blood circulation insufficiency. Which disorder of microcirculation occurs in this case?

Ischemia

Arterial hyperemia

Venous hyperemia

Thrombosis

Embolism

Signs of disorder of microcirculation in form of venous hyperemia were observed in a patient with gingivitis . This condition manifested by cyanosis and edema of

mucosa and decrease in local temperature. What is the major mechanism of congestion development?

Increased permeability of vessel wall

Blood factors

Perivascular changes

Disturbances of lymph outflow

Exudation from vessels

C. Bernard observed increase in secretion of submandibular salivary gland and development of arterial hyperemia irritating chorda tympani (branch of nervusfacialis) in an experiment. What sort of arterial hyperemia it is according to mechanism of its development?

Neurotonic

Neuroparalytic

Metabolic

Reactive

Working

Thrombosis of coronary artery results in myocardial infarction. Which mechanism will be dominating ones in this disease?

Calcium -dependent

Electyolytic-osmotic

Acidosis

Protein-dependent

Lipid-dependent

One of the most dangerous points in myocardial infarction pathogenesis is enlargement of the zone of necrosis, dystrophy, and ischemia. Increase in

myocardial oxygen consumption plays important role in development of indicated processes. What substances contribute to this process?

Catecholamines

Chlorine ion

Cholesterol

Acetylcholine

Adenosine

High level of arterial blood pressure is observed in a patient with disease accompanied by ischemia of renal parenchyma. What is the leading factor in increase in arterial blood pressure in this patient?

Excess of angiotensin II

Excess of antidiuretic hormone

Augmentation of cardiac output

Increase in tonus of sympathetic nervous system

Hypercatecholaminemia

Patient has acute retrosternal pain irradiating into left arm, which cannot be controlled by the nitroglycerine for 30 minutes. What kind of changes develop in the patient's heart?

Myocardial ischemia

Pathological hypertrophy of myocardium

Sharp increase in coronary blood flow

Mitral valve insufficiency

Inflammation of pericardium

Severe stess was induced in a experimental animal. Under this condition, necrotic changes of myocardium developed in the animal. What is the leading reason for pathogenesis of this injury?

Increase in calcium content in cardiomyocytes

Decrease in mitochondrial ATP synthesis

Affection of Na-K pump functions

Coronary blood flow insufficiency

Increase in myosin ATP-activity

After fast surgical removing of coronary arteries occlusion in a patient with ischemic heart disease, secondary injury of myocardium develop (reperfusion syndrome) characterized by necrobiotic changes in the focus of previous ischemia. This complication results from:

Deficiency accumulation of calcium ions

Accumulation of hydrogen ions

Deficiency of potassium ions

Deficiency of adenosine triphosphate

Deficiency of creatine phosphate

Condidtion of a patient with thrombophlebitis of lower extremities suddenly became worse. Weakness, dyspnea, pain in the chest, and cyanosis developed in him. It was established that pulmonary thromboembolism results in acute cor pulmonale. What is the leading link in forming of this syndrome?

Increased blood pressure in pulmonary artery

Increase in central venous pressure

Abrupt arterial blood pressure drop in systemic circulation

Weakening of heart function resulting from myocardial hypoxia

Disorders of external respiration

Atophan, which leads to vessel sclerosis, was introduced to gastric arteries of an experimental animal with purpose of gastric ulcer modeling. Which mechanism of gastric mucosa injury is the leading one in this experiment?

Hypoxic

Neurodystrophic

Mechanical

Dysregulative

Neurohumoral

The theory exists that atherosclerosis plays an important role in periodontitis development, effecting vessels of gums. What kind of local blood circulation disorders develops under atherosclerosis of vessels?

Ischemia

Active hyperemia

Passive hyperemia

Embolism

Disorders of lymph outflow

Instantaneous death of pilots occurs under depress urization of airplane cabin at the altitude of 19 km. What is the reason for it?

Multiple gas embolism

Hemorrhage to the brain

Gas embolism of cerebral vessels

Bleeding

Paralysis of respiratory center

A patient has acute pain in his chest, dyspnea, tachycardia, cyanosis, and decreased BP. Pulmonary infarction was diagnosed in the patient. Which factor is the most common cause of pulmonary infarction?

Embolism by thrombus from veins of lower extremities

Congestion in the pulmonary circulation

Increase in number of platelets

Activation of fibrinolytic system

Pneumothorax

A patient has felt cold, chills, “goose flesh”, increase of body temperature. Which else changes characterize the first period of rapid elevation of body temperature?

Equilibration between heat production and heat loss

Tachycardia

Dilation of skin vessels

Decrease of arterial pressure

Increase of metabolism on 100-200%

Body temperature of patient becomes pyretic. Which substances have to act to neurons of thermoregulation for fever development?

Kallidinum

Interferon

Prostaglandins

Free radicals

Leucotriens

The temperature of patient with infectious disease increased to 39.5-40.5 C in a day and kept that level about 1 hour, but then it returned to the normal level. Which type of fever is described in that case?

Continuous

Intermittent

Remittent

Recurrent

Atypical

The body temperature of a patient with infectious disease increased to 39.5-40.5 C in a day and kept this level about 1 hour, but then became normal again. Which disease is characterized by described type of fever?

Tuberculosis

Influenza

Peritonitis

Brucellosis

Malaria

A patient had fever after injection of pyrogenal. His skin has become pale, cold; chill appeared in him, oxygen consumption increased. How do the processes of thermoregulation change in described period of fever?

Decrease of heat loss

Increase of heat production and decrease of heat loss

Heat loss is equal heat production

Decrease of heat production and increase of heat loss

Decrease of heat production

Body temperature of the 8-year-old Sasha with meningitis was on the level 39-40 C in 1.5 hours. There were acute hyperemia of skin, profuse sweating, decrease of arterial pressure, and loss of consciousness in him. Which medicine is the pathogenetic remedy?

Vasoconstrictors

Antibiotics

Antipyretics

Pyrogenal

Sulfanilamide

After being in the room with air temperature 40 C and humidity 80% a patient has been brought to hospital in grave condition. He was unconscious; he had tachypnea, tachycardia, and body temperature 41 C. reanimation was failed. The patient has died. What is the most possible direct reason of the death in this case?

Heart failure

Paralysis of the breath center

Collapse

Coagulation of blood and decrease of volume of circulation blood

Dehydration

Fever of the patients with relapsing fever is characterized by several periods of pyretic temperature per day and several periods of normal temperature. Such type of temperature curve is called:

Febris continua

Febris hectica

Febris intermittens

Febrisrecurrenns

Febris atypica

Sharp increase of the temperature to 38.7 C was marked in a patient with acute purulent periodontitis. His body temperature has decreased to normal level after opening the pulp cavity. Which type of fever was in the patient?

Septic

Efemeral

Recurrent

Remittent

Continua

A patient suffers from osteomyelitis of maxilla. His body temperature increased to 40 C and then sharply decreased to 35.6 C every day. Which type of fever curve is characterized by these changes?

Continua

Intermittent

Reccurens

Atypical

Hectica

Acute increase of body temperature, dyspnea, tachycardia, nausea, convulsions, and loss of consciousness developed in a worker, working in the thick uniform in summer. What was the most possible reason of development of those symptoms?

Equilibration between heat loss and heat production

Decrease of heat production

Decrease of heat loss

Increase of heat production

Increase of heat loss

A man in light clothes is staying in a room with air temperature +14 C. Windows and doors are closed. Which way of heat loss is the most considerable in this case?

Perspiration

Evaporation

Conduction

Radiation

Convection

Experimental mice were kept in a lodge with air temperature 4 C. Which adaptive reaction supplies its thermal homeostasis?

Decrease of oxidation enzyme activity

Limitation of heat loss

Decrease of oxygen consumption

Anabiosis

Increase of blood consumption

Inclination of the set point of thermoregulation to higher level due to action of IL-1 is in a patient. What is the name of this typical pathological process?

Fever

Hyperthermia

Hypothermia

Inflammation

Hypoxia

The body temperature of a patient with crupous pneumonia is 39 C. The difference between the morning and evening temperature of his body didn't exceed 1 C during 9 days. Which type of the fever curves was that?

Continua

Hectic

Intermittent

Hyperpyretic

Reccurens

A patient has fever with following stages: incrementi, fastigii, decrementi. Which disease these features can characterize?

Acute pneumonia

Acromegaly

Diabetes mellitus

Hyperaldosteronism

Myocardial hypertrophy

Body temperature of patient is pyretic; his skin is hot and red. What correlation between processes of heat production and heat loss in described stage of fever?

Heat loss is less then heat production

Heat loss is equal heat production

Heat loss is more than heat production

Heat production is more than heat loss

Heat production is less than heat loss

Increase of “acute phase” proteins level in blood such as ceruloplasmin, fibrinogen, c-reactive protein is typical for development of fever. Indicate the possible mechanism of this phenomenon.

Degranulation of mast cells

Stimulative influence of IL-1 on hepatocytes

Destructive action of elevated temperature to the cells of the organism

Proliferate action of IL-2 to T-lymphocytes

Adaptive reaction of the organism to pyrogen

Most infectious diseases are characterized by development of fever. It can be explained:

Formation of IL-1 during phagocytosis of microorganisms

Intoxication of the organism

Degranulation of mast cells

Activation of T and B lymphocytes

Processes of exudation

Attacks of fever in a patient occurs periodically. During the attack the body temperature sharply increases, keeps pyretic level nearly 2 hours and then decreased to normal level. This type of fever is typical for:

Brucellosis

Tertian fever

Sepsis

Relapsing fever

Epidemic typhus

Body temperature of a patient is 39 C for several hours (stadium fastigii). Indicate which changes of physiological are the most typical for this stage of fever:

Increase of heat production

Bradycardia

Ingibition of phagocytosis

Decrease of heat production

Heat production is equal heat loss

In patient with pneumonia the increased bode temperature was revealed. What sort of biological active substances play the most important role in development of fever?

Interleukin-1

Leukotriens

Serotonin

Histamine

Bradykinin

In a patient with prolonged fever the course of treatment body temperature begins decreasing. What is the possible mechanism of temperature decrease?

Protective activation of immune system

Decrease of heat production due to reducing metabolic rate

Decrease of production of pyrogens

Increase of resistance of orgamism to action of the pyrogens

Increase of heat loss due to peripheral vasodilatation

What is the most efficient mechanism of heat loss in case of following environmental conditions: 80% air humidity and +35 C (95 degree Fahrenheit) air temperature?

Hyperventilation

Sweating

Conduction

Convection

Irradiation

During the examination of the patient following symptoms were revealed: redness of skin, skin is hot and dry to touch. Heart bit rate is 92 per minute, respiratory rate

is 22 per minute, body temperature is 39.2 C (102.5 degree Fahrenheit). What is the correlation between heat production and heat loss in described period of fever?

Heat production surpasses heat loss

Heat production equals to heat loss

Heat production is less than heat loss

Decreasing of heat production without changes of heat loss

Increasing of heat production without changes of heat loss

Rate of appearance of tumor is increased in elderly people. One of the main reasons for this is:

Decrease in activity of cellular immunity

Increase in activity of cellular immunity

Rise of disorders of mitoses

Decrease of intensity of antibody production

Increase of intensity of antibody production

In a patient with metastases of lung carcinoma introduction of cytostatics led to suspension of metastases growth at first but later metastases resumed spread. What is the most possible mechanism of secondary growth of metastases?

Rise of genetic heterogeneity of tumor cells

Absence of contact braking

Absence of Heiflik's limit

Increased glucose consumption by tumor

Increased amino acids consumption by tumor

A 56-years-old patient, who had contact with diethylnitrozamine at his work place, complains of pain in right subcostal area, weakness, loss of appetite, and decreased workability. At examination of this patient: surface of his liver is rough,

splenomegaly and ascites are present in him; his body temperature is 37.2 C; in his blood analysis ESR is 25 mm/hour, besides neutrophilic leukocytosis, and hypochromic anemia were found. What disease developed in the patient's organism?

Cancer of liver

Hepatitis

Cirrhosis of liver

Gallstone disease

Dyskinesia of bile ducts

Approximately 60% of tryptophan is oxidized through serotonin pathway in case of malignant intestine carcinoma. What vitamin demand is increased for a patient with malignant carcinoma of intestine?

Nicotinic acid

Pantothenic acid

Folic acid

Pyridoxine

Riboflavin

Malignant tumor of lung was diagnosed in a patient. What feature of tumor growth its malignancy?

Infiltrative growth

Unregulated growth

Unlimited growth

Expansive growth

Appearance from one cell

Tumor has developed in a patient with innate immunodeficiency. What factor of non-specific immunity participates in anti-tumor defense?

Lysozyme

Interleukin-1

Lactoferrine

Arylsulfatase

Properdine

The woman complained to the doctor for changing of voice , appearance of hair on the face, and reduction of breast. Where would a tumor develop that could lead to these symptoms?

Tumor of zona reticulata of adrenal glands

Tumor of ovaries

Tumor of anterior lobe of pituitary gland

Tumor of zona glomerulata of adrenal glands

Tumor of zona fasciculata of adrenal glands

Gamma-interferon was used for treatment of the patient, suffering from tumor. What property of this substance was used for treatment of this tumor disease?

Activation of killer effect

Activation of synthesis of Ig

Activation of B-lymphocytes

Activation ff complement system

Activation of macrophages

Following changes can occur in development of tumor:

Insulinoma-hypoglycemia

Pheochromocytoma-hypotension

Aldosteroma-hypohydratation

Tumor of zona reticulata of adrenal glands-inhibition of sexual gowth

Tumor of thyroid gland – hypothyroidism

Cancer of lung developed in a patient, smoking for a long time. Which cancerogenous substance is present in tobacco smoke, related to polycyclic aromatic carbohydrates?

Benspyren

Dimethylaminobenzol

Beta-naphthylamine

Dietilnitrozamine

Orthoaminoazotoluol

A male patient, 40, has stenotic (without metastases) esophagus cancer. The following changes were revealed in that patient: muscular and fat tissue atrophy, brownish color of the skin, thin epidermis, and cardiac atrophy. What's the reason of such symptoms?

Alimentary cachexy

Myasthenia

Addison's disease

Cancer cachexy

Brown induration

In 1920 Rhauss managed to cause sarcoma in chickens by cell-free infiltrate inserting. What was the method of experimental modeling?

Induction

Explantation

Isotransplantation

Homotransplatation

Heterotransplantation

There is high stage of interaction between lung cancer and tobacco smoking. What chemical carcinogen is contained in tobacco smog?

3,4-benspyren

Orhtoaninotoluol

Aphlatoxin

Methylcholatren

Dyethylnitrosamine

Patient complained of weight loss and weakness, in blood analysis hypoglycemia and hyperinsulinemia were revealed. An additional study tumor of beta-cells was discovered. Insulin synthesis improvement in this case is a result of:

Functional athypia

Biochemical athypia

Morphological athypia

Differentiation athypia

Immunological athypia

What biological process augmentation is typical for tumor cells?

Anaerobic glycolysis

Decarboxilation

Tissue respiration

Lipolysis

Gluconeogenesis

Erlich’s tumor was transplanted to animal. What is the evidence of tumor progression?

Resistence to cytostatics

Unlimited growth

Anaplasia

Infiltration

Tumor weight increasing

Unpainted formation under the jaw was appeared in liquidator of Chernobyl’s disaster after 12 years of accident. The size of it has increased till last month. The blood analysis is in norm. What pathological process is most suspicious in this case?

Malignant tumor

Lymphadenitis

Syaloadentitis

Abscess

Cyst

What is the most effective manner of experimental transplantation of tumor?

Autotransplantation

Isotransplantation

Heterotransplantation

Homotransplantations

Allotransplantation

There is a tumor of tongue in patient. What characteristics of tumor may be considerate as malignant?

Infiltration

Dysplasia

Expansion

Pasteur's positive effect

Mitosis increasing

What cell structure is a "target" for chemical cancerogens?

Nuclear DNA

Lysosomes

Mitochondria

Cytoplasmic membrane

Ribosomes

A patient with lung cancer has been smoking 30 cigarettes per day for 20 years. What he group of cancerogens is in tobacco smog?

Polycyclic carbohydrates

Aminoasosubstances

Nitrosamines

Amines

Heterocyclic carbohydrates

A female patient was admitted to the hospital with diagnosis "uterine cervix cancer". What from the following processes are not typical for tumor cells?

Anaerobic glycolysis

High glucose metabolism

Aerobic glucosis

High aminoacides metabolism

Organospecificity absence in aminoacides consumption

A patient with urinary bladder cancer was working in coke factory. What substance was the most probable reason of this pathological condition?

Naphtylamine

Dichlorethane

Vinegar acid

Alcohol

Pethroleynicaether

It is established that tumor tissue receives in 20-25 times less of glucose that intact tissue in equal glucose amount. What metabolic changes lead to such event?

Aerobic glycolysis enhancement

Oxidation improvement

Normal interaction of these processes

Tissue respiration improvememt

Decreasing of anaerobic glycolysis

They got nitrogenous nitrite to experimental animals. A tumor was developed in 80% of animals. What was the group of cancerogens?

Nitrosamines

Aminoasosubstances

Polycyclic carbohydrates

Simple chemical substances

Hormones

After Chernobyl disaster morbidity of tumors has been increasing. What action of the radiation has been appearing?

Oncogenic

Thermal

Mutagenic

Cytostatics

Immunostimulative

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Increase in activity of cellular immunity

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Pantothenic acid

Folic acid

Pyridoxine

Riboflavin

An 11-month-old infant is only 60% of ideal body weight. The body is proportionately small in size. Upon physical examination, the body is listless and does not respond with vocalization when touched. A small purplish contusion is noted over the right lower extremity. Which of the following is the most likely diagnosis?

Marasmus

Physical abuse

Hypocalcemia

Premature birth

Vitamin C deficiency

A 4 -year-old child was born at term, with no congenital anomalies. She is now only 70% of normal body weight, though she shows dependent edema of the lower extremities as well as an enlarged abdomen. Her flaking skin shows irregular areas of depigmentation, hyperpigmentation and desquamation. These findings are most suggestive of which of the following nutritional problems?

Kwashiorkor

Marasmus

Scurvy

Vitamin A toxicity

Niacin deficiency

A 5-year-old child has complained of pain in his legs for the past year. On physical examination, there is bowing deformity of his lower extremities. Plain film radiographs of his lower legs shows widened epiphyses and bowing of tibiae. Bone mineral density appears normal, consistent with failure of osteoid matrix formation. Which of the following vitamin deficiencies is this child most likely to have?

C

D

E

B1

B6

A patient with scurvy generally expresses impaired healing due to:

All of the above

Lack of ascorbic acid

Decreased hydroxylation of certain amino acids

Reduced secretion of procollagen

None of the above

In addition to folic acid deficiency, what other nutritional problem is believed to help cause neural tube defects?

Vitamin A toxicity

Vitamin A deficiency

Vitamin B 12 deficiency

Vitamin D deficiency

Vitamin D toxicity

Patients with scurvy bleed because of a problem with:

Capillary integrity

Factor II only

Factors II, VII, IX and X

Fibrinogen

Platelets

A 49 –year-old man has a history of chronic alcohol abuse. He has had worsening problems with ambulation the past year. On physical examination his gait is ataxic. He is diagnosed with Wernicke encephalopathy. He is most likely t have a deficiency of which of the following vitamins?

B1

A

C

D

E

A 3- years-old child has had multiple respiratory tract infections over the past 6 months. On physical examination the child is only 50% of ideal body weight and exhibits marked muscle wasting and lethargy. Laboratory fingins include a serum albumin of 3.8 g/dL and a hemoglobin of 9.2 g/dL. Which of the folowing is the most likely diagnosis in this child?

Kwashiorkor

Marasmus

Vitamin A deficiency

Folate deficiency

Anorexia nervosa

A 49-year-old man was suffering 12 years ago from rheumatic myocarditis, endocarditis and insufficiency of mitral valve. Examinations showed the absence of inflammatory process, sufficient minute blood volume. What is it?

Pathological condition

Pathological reaction

Pathological process

Typical pathological process

Compensatory reaction

The 12-year-old boy took part in sport events in light athletic. Weakness, headache, loss of appetite and rise in temperature to 37.8°C appeared in him on the next day. What period of disease is it?

Prodromal period

Final period of disease

Period of manifestation

Contact period

Latent period

A 3- years-old child has had multiple respiratory tract infections over the past 6 months. On physical examination the child is only 50% of ideal body weight and exhibits marked muscle wasting and lethargy. Laboratory fingins include a serum albumin of 3.8 g/dL and a hemoglobin of 9.2 g/dL. Which of the folowing is the most likely diagnosis in this child?

Kwashiorkor

Marasmus

Vitamin A deficiency

Folate deficiency

Anorexia nervosa

. A 49 –year-old man has a history of chronic alcohol abuse. He has had worsening problems with ambulation the past year. On physical examination his gait is ataxic. He is diagnosed with Wernicke encephalopathy. He is most likely t have a deficiency of which of the following vitamins?

B1

A

C

D

E

An 11-month-old infant is only 60% of ideal body weight. The baby is proportionately small in size. Upon physical examination, the baby is listless and does not respond with vocalization when touched. A small purplish contusion is note dover the right lower extremity. Which of the following is the most likely diagnosis?

Marasmus

Physical abuse

Hypocalcemia

Premature birth

Vitamin C deficiency

A 4 -year-old child was born at term, whith no congenital anomalies. She is now only 70% of normal body weight, though she shows dependent edema of the lower extremities as well as an enlarged abdomen. Her flaking skin shows irregular areas of depigmentation, hyperpigmentation and desquamation. These findings are most suggestive of which of the following nutritional problems?

Kwashiorkor

Marasmus

Scurvy

Vitamin A toxicity

Niacin deficiency

A 5-year-old child has complained of pain in his legs for the past year. On physical examination , there is bowing deformity of his lower extremities. Plain film radiographs of his lower legs shows widened epiphyses and bowing of tibiae. Bone mineral density appears normal, consistent with failure of osteoid matrix formation. Which of the following vitamin deficiencies is this child most likely to have?

C

D

E

B1

B6

Patients with scurvy bleed because of a problem with:

Capillary integrity

Factor II only

Factors II, VII, IX and X

Fibrinogen

Platelets

A patient with scurvy generally expresses impaired healing due to:

All of the above

Lack of ascorbic acid

Decreased hydroxylation of certain amino acids

Reduced secretion of procollagen

None of the above

In addition to folic acid deficiency, what other nutritional problem is believed to help cause neural tube defects?

Vitamin A toxicity

Vitamin A deficiency

Vitamin B 12 deficiency

Vitamin D deficiency

Vitamin D toxicity

Pain in a left half of the chest and dyspnea appear in a patient during walking. This pain increases during respiration. The attack of the pain was stopped by using narcotics. At examination of the patient following data were revealed: severe condition, respiratory rate is 28 per min., respiration is shallow and is dull in left axillary region. Blood pressure is 140/80 mmHg. Patient has sputum with blood.

This patient has varicose dilation of veins. In purpose to correct main pathogenetic link it is necessary to use:

Coronarolytics

Antibiotics

Anticoagulants

Antihistamine preparations

Spasmolytics

A 39-years-old patient has been suffering from gastric ulcer for last 4 years. Pain in epigastric region, heartburn, nausea and constipation appear mainly in autumn and spring. Name this condition:

Acute period

Remision

Complication

Pathologic condition

Relapse

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Marasmus

Scurvy

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Decreased hydroxylation of certain amino acids

Reduced secretion of procollagen

none of the above

Gasping respiration appears in a patient with severe lung pathology. What terminal condition is this characteristic for?

Agony

Pre-agony

Clinical death

Biological death

Terminal pause

A 10-years-old child endured several rheumatic attacks. At examination of him it was established that he had inflammatory process in his joints and signs of mitral valve insufficiency. What pathological appearance in this patient may be attributed to “ disease”?

Rheumatism

Mitral valve disease

Mitral valve insufficiency

Inflammation of joints

Arthritis

It is characteristically for cholera to lose large quantity of water and sodium ions from the organism. The basis of biochemical action of cholera toxin is:

Activation of adenilatcyclase in enterocytes of small intestine

Oxidation of aldosterone in the cortex of adrenal glands

Itensification of renin secretion by the cells of juxtaglomerular apparatus

Decrease of synthesis of antidiuretic hormone in hypothalamus

Activation of synthesis of atrial natriuretic hormone

Wasp has stung a woman. Edema and hyperemia develop at woman's left cheek (site of the bite). What mechanism of edema development is primary in this cast?

Increase of capillary permeability

Decrease of osmotic pressure of blood

Impediment for lymphatic drainage

Increase of oncotic pressure of tissue fluid

Increase of hydrostatic pressure of blood in capillaries

In worker of fusing workshop thirst develops due to enhanced sweating. He drinks a lot of water without salt. What kind of water-salt balance disturbance the most possibly develops in this case?

Hypoosmolarhyperhydration

Hyperosmolar hyperhydration

Hyperosmolar hypohydration

Hypoosmolar hypohydration

Isoosmolar hypohydration

A boy, aged 9, with edemas was admitted to the hospital. What proteins content in blood is decreased in this case?

Albumins

Protamines

Globulins

Hemoglobin

Hystons

Worker of fusing workshop, man of 23 years old and of 60 kg weight, was admitted to the emergency department. Examination of water-salt exchange in this patient displays: content of general water is 33 liters (55% of body weight), extracellular sector constitutes 28.6% of body weight (17.2 liters), intravascular fluid costitutes 4% of body weight (2.4 liters) and inracellular sector costitutes 26.3% of body weight (15.8 liters). Osmotic pressure of patient's blood is 340 mosm/l; content of sodium in it – 160 mmol/l. Patient's urination is 0.4 liters per 24 hours. Determine the type of dyshydration.

Hyperosmolar hypohydration

Hyperosmolar hyperhydration

There is no dyshydration

Isoomolar hyperhydration

Hypoosmolar hypohydration

A patient with severe nephropathy accompanied by severe edema syndrome that develops as complication of bronchiectasis. Laboratory examination of this patient displays adundant proteinuria, cylinderuria, distinct decrease of protein content in blood serum, hyperlipidemia, hypokalemia and other pathological chages. What is the most important link in development of edemas in this patient?

Decrease of oncotic pressure of blood

Increase of osmotic pressure or interstitial fluid

Increase of hydrostatic pressure of blood

Blockade of microvessel permeability

Increase of microvessel permeability

A patient has increased osmolarity of urine and decreased urination due to intensive sweating and dehydration. What hormone secretion changes provide compensatory retention of water at first?

Antidiuretic hormone

Aldosterone

Corticosterone

Thyroxin

Insulin

Content of sodium in patient's blood serum is 100 mmol/l/ What does this condition may manifest in?

Dehydration

Edemas

Arrhythmias

Heart arrest

Tachycardia

In a patient, aged 44, thirst develops after burns. What receptors generate impulses that underlie thirst development in this case?

Osmoreceptors

Pain receptors

Thermal receptors

Tactile receptors

Chemoreceptors

Isoomolar hypohydration has been formed in a patient due to severe diarrhea. What symptoms are characteristic for this disturbance of water exchange?

Hypovolemic shock

Edematous syndrome

Decrease of content of water inside cells

Polyuria

Arterial hypertension

In a patient with affection of kidneys hypoosmolar hyperhydration(water poisoning) has developed.What is the main pathogenic factor of this syndrome?

Anuria

Hypoaldosteronism

Polyuria

Hypoproteinemia

Increase of microvessel permeability

Hyperosmolar hypohydration has been formed while prolonged water starvation. Which of following manifestation are typical for this condition?

Cramps and hallucinations

Arterial hypretension

Hypoisostenuria

Hypothermia

Increased salivation

In patient suffered from severe chronic glomerulonephritis retention of isoosmolar fluid in organism and distinct edematous syndrome occur. What is the major factor of edema development in case of glomerulonephritis?

Secondary aldoseronism

Hyperproteinemia

Hypoproteinemia

Hypoaldosteronism

Arterial hypertension

In patients with myeloma content of proteins in blood plasma is increased up to 200 g/l. This leads to redistribution of water between intracellular, interstitial and intravascular spaces. What direction does water mainly move at in this case?

From interstitium to blood vessels

From cells to interstitium

From interstitium to cells

From blood vessels to interstitium

From lymphatic vessels to interstitium

A patient of 18 years old and of 60 kg weight was admitted to the hospital with signs of hemic hypoxia resulting from poisoning by nitric compounds. Examination of water exchange of this patient displays: general water – 64% of body weight, extracellular fluid – 18%, intravascular fluid- 5%, and intracellular fluid – 46%; osmotic pressure of blood plasma is 250 mosm/l; urination is 0.8 L per 24 hours. Define the type of dyshydration?

Hypoosmolar hyperhydration

There is no dyshydration

Isoosmolar hyperhydration

Isoosmolar hypohydration

Hypoosmolar hypohydration

Edemas at lower extremities occur in a patient suffered from severe heart failure. What is the leading mechanism of edema development in this case?

Activation of renin-angiotensin system

Centralization of blood circulation

Lowering of hydrostatic pressure

Increase of content of aldosteron in blood

Increase of secretion of antidiuretic hormone

What is the initial link in formation of heart edemas?

Decrease of minute heart volume

Increase of vascular permeability

Activation of renin-angiotensin system

Increase of content of aldosterone in blood

Increase of secretion of antidiuretic hormone

What is the leading factor of edema development in case of nephrotic syndrome?

Hypoalbuminemia

Increase of hydrostatic pressure in capillaries

Increase of vascular permeability

Dynamic lymphatic insufficiency

Increase of blood volume

Patient suffered from cirrhosis of liver was given with 500 ml of 5% glucose solution with medicines. What disturbances of water-salt balance may appear in this patient?

Hypoosmolar hyperhydration

Hyperosmolar hyperhydration

Isoosmolar hyperhydration

Hypoosmolar hypohydration

There is no dyshydration

Patient has edema of right lower part of face and pulsing pain in tooth, which intensifies when taking some hot food. Dentist has diagnosed acute pulpitis. What is the leading mechanism of edema development in this case?

Disorders of microcirculation in the focus of inflammation

Disorders of trophic function of nervous system

Hypoproteinemia

Hyperosmia

Lymphocytosis

Toxic lung edema was modeled in rat using solution of ammonium chloride. What is the leading mechanism of edema development in this case?

Increase of vascular permeability

Reducing of colloid-osmotic pressure

Rising of venous pressure

Disorders of neural and humoral regulation

Intensification of lymphatic drainage

A rat was intravenously injected by 10 ml of 40% glucose solution. In 60 min coma develops due to hyperosmolar dehydration in this rat. What is the mechanism of edema development in this case?

Increase of osmotic pressure of extracellular fluid

Loss of water and salts

Reduction vasopessinsin

Increase of oncotic pressure of extracellular fluid

Disturbance of acid-base balance

Patient has extracellular edema of tissues (dimensions of soft tissues of extremities, liver, and others are enlarged). What parameter of homeostasis decrease do these changes result from?

Oncotic pressure of blood plasma

Viscosity

pH

Hematocrite

Osmotic pressure of blood plasma

At complete starvation (with taking water) generalized edemas develop. What is the leading pathogenic factor in this case?

Decrease of oncotic pressure of blood plasma

Increase of oncotic pressure of interstitial fluid

Decrease of osmotic pressure of blood plasma

Increase of osmotic pressure of interstitial fluid

Decrease of hydrostatic pressure of interstitial fluid

When treating for dehydration by means of salt-poor fluids at the background of sharply reduced excretory renal function resulted from tubular necrosis the worsening of general condition, confused consciousness, convulsive readiness, and brain edema with vomiting develop. What kind of water-salt exchange disturbances takes place in this case?

Hypoosmolar hyperhydration

Isoosmolar hyperhydration

Hyperoosmolar hyperhydration

Hypoosmolar hypohydration

Hyperosmolar hypohydration

As it is known, general amount of water in an organism depends on age, body weight, and sex. Besides, pathogenetic classification of dehydration is impotent. This classification includes forms of mineral salt deficiency, forms of water deficiency, and transitional forms. What reasons, according to this classification, belong to form of mineral salt deficiency?

Loss of electrolytes through the stomach

Loss of water is due to polyuria

Reduced intake of water

Loss of water with a bleeding

Loss of water is due to hyperventilation

A patient has uneasiness in the chest and difficult breathing after physical exertion. Sometime later cough with foamy liquid phlegm appears. Significant cyanosis develops in the patient. What is the leading mechanism for edema development is this case?

Hydrodynamic

Colloid

Membranogenous

Lymphogenic

Osmatic

In inflammation increased vascular permeability and increase of hydrostatic pressure are observed in microcirculatory vessels. The level of colloid-osmotic pressure of blood does not significantly changes. There are shift of pH towards acid state, rise of osmotic pressure, and increase in dispersion of proteins in the interstitial fluid. What kind of edema is observed in this case?

Mixed

Hydrodynamic

Colloid-osmotic

Lymphogenic

Membranogenous

A person, who has been starving for along time, has edemas. What is the main mechanism of edema development in this case?

Decrease of oncotic pressure of the blood

Increase of oncotic pressure of tissues

Increase of hydrostatic pressure of venous blood

Decrease of hydrostatic pressure of tissues

Decrease of blood circulating volume

In person, who was bitten by bees, edema of the face and the upper extremities developed. What is the main mechanism of edema development in this case?

Increase of vascular permeability

Increase of hydrostatic pressure in capillaries

Decrease of hydrostatic pressure of tissues

Increase of oncotic pressure of tissues

Decrease of oncotic pressure of blood

Patient was admitted to the hospital in comatose state. Accompanying people said that hi lost consciousness at training while he was finishing the Marathon distance. What sort of coma is the most possible in this patient?

Hypoglycemic

Hyperglycemic

Hypothyroid

Hepatic

Diabetic ketoacidosis

Patient has hyperglycemia, glucosuria, polydipsia, polyphagia, and polyuria. What hormone hyposecretion do these changes develop due to?

Insulin

Antidiuretic hormone

Atriopeptide

Glucagon

Cortisone

A patient, aged 80, complains of increased appetite, thirst, elevated urination, and worsening of general condition after the taking some sweet food. What disease is it?

Diabetes mellitus

Hypercorticism

Hyperthyroidism

Hypothyroidism

Diabetes insipidus

A man, aged 38, is under the course of treatment for schizophrenia at in patient department. Contents of glucose, ketone bodies, and urea in his blood are normal. Shock therapy with regular injections of insulin has led to development of insular coma, and after that state of patient becomes better. What is the most possible reason for insular coma?

Hypoglycemia

Glucosuria

Dehydration of tissues

Metabolic acidosis

Ketonemia

In worker at polar station, who has been working there for a long time, hemorrhage form gums occur, his teeth sway and pull out. What vitamin deficiency leads to these changes?

Ascorbic acid

Tocopherol

Ergocalciferol

Folic acid

Nicotinic acid

A patient, aged 50, complains of increased appetite, thirst, and loss of body weight, weakness. At laboratory examination rise of amount of glucogen his blood revealed. What type of cells is injured in case of this disease development?

B-cells of Langerhans islets

Lipotropocytes

Thyrocytes

A-cells of Langerhans islets

Pancreatocytes

In 18-years-old patient, while laboratory examining presence of glucose in urine and normal concentration of glucose in blood plasma were revealed. What disorder is the most possible cause of these changes?

Disorders of tubular reabsorption

Disorders of glomerular filtration

Disorders of tubular secretion

Disorders of glucocorticoids secretion

Disorders of insulin secretion

Dyspepsia and vomiting are observed in a newborn after feeding with milk. These phenomena disappear after feeding with glucose solution. What enzyme that takes part in carbohydrate digestion is deficient in case of these changes development?

Lactase

Amylase

Maltase

Isomaltase

Saccharase

In patient painfulness along large nervous trunks and increase of pyruvate in blood are revealed. What vitamin deficiency may lead to these changes?

Thiamin (B1)

Pantothenic acid

Nicotinic acid (PP)

Biotin

Riboflavin (B2)

A newborn was admitted to the emergency department with following symptoms: vomiting, diarrhea, disorders of growth and development, cataract, and mental retardation. Galactosemia was diagnosed. What enzyme deficiency takes plase in this case?

Glucose-l-phosphate uridiltransferase

Glucokinase

Glucose-6-phosphate dehydrogenase

UDP glucose pyrophosphorilase

UDP glucose-4-epimerase

Flatulence, bowel spasms, abdominal pain and diarrhea often develop in some people after taking milk. These symptoms arise in 1-4 hours after intake only one glass of milk. What component of milk these symptoms develop due to?

Lactose

Galactose

Maltose

Saccharose

Fructose

Newborn has been refusing food, having vomiting and diarrhea, and some time later its crystalline lens become opaque. At examination of newborn: glucose in blood – 8.5 mmol/L and in urine – 1%. What is the most possible diagnosis?

Galactosemia

Phenylketonuria

Tyrosinosis

Cystinuria

Alkaptonuria

In woman, aged 45, without symptoms of diabetes mellitus, content of glucose in blood on an empty stomach reaches 7.5 mmol/L. What test is necessary to be performed?

Determination of tolerance to glucose

Determination of residual nitrogen in blood

Determination of glucose in blood on an empty stomach

Determination of ketone bodies in urine

Determination of glycosylated hemoglobin

In a patient, suffered from frequent hemorrhages from internal orgasm and mucous membranes, proline and lysine were found in structure of collagen fibers. What vitamin deficiency contributes disorders of these amino acids hydroxylation?

Vitamin C

Vitamin E

Vitamin K

Vitamin A

Vitamin B1

In patient who suffered from alcoholism B1 hypovitaminosisis often observed, as a consequence of nutrition disturbances. Symptoms of vitamin B1 deficiency are disorders of nervous system, psychoses, and amnesia. Why cells of nervous tissue are particularly susceptible to thiamine deficiency?

Aerobic decay of glucose is broken

Lipolysis in adipose tissue is increased

Oxidation of fatty acids is broken

Glycolysis is intensified

Glycolysis is decreased

According to result of gastric juice analysis following traits were revealed: common acidity – 24 mmol/L, free hydrochloric acid – 1.5 mmol/L, content of gastric mucoprotein is decreased. What vitamin deficiency is observed in organism?

Cobalamin

Folic acid

Pantothenic acid

Nicotinamide

Bioflavonoids

A 24-years-old woman complains of dryness in mouth and loss of weight in spite of good appetite. At examination of the patient: height – 162cm, weight – 65 kg, content of glucose in blood – 8.3 mmol/L, and presence of glucose in urine. What diseases does these symptoms characteristic for?

Diabetes mellitus

Steroid diabetes

Diabetes insipidus

Alimentary glucosuria

Renal diabetes

A man, who have been suffering from diabetes mellitus for a long time, was admitted to the hospital because of rapid worsening of his condition: general malaise, polyuria, polydipsia, nausea and vomiting, confusion, sleepiness. Kussmaul respiration and scent of acetone from mouth were observed in this patient. In his urine high contents of glucose and acetone bodies were found. What is the reason for worsening of patient's condition?

Diabetic ketoacidosis

Gas acidosis

Heart failure

Renal failure

Hypoglycemic coma

Treatment of the child for rachitis using vitamin D3 was not efficient. What is the most possible reason for ineffectiveness of treatment?

Disorders of hydroxylation of vitamin D3

Deficit of lipids in food

Disorders of including vitamin D3 into enzyme

Intensified using vitamin D3 by intestine microflora

Disorders of including vitamin D3 with blood plasma proteins

Content of glucose in patient's blood an empty stomach – 5.65 mmol/L, in one hour after taking sugar – 8.55 mmol/L, and in two hour after taking sugar – 4.95 mmol/L. These signs are characteristic for:

Healthy person

Person suffered from hidden diabetes mellitus

Person suffered from non-insulin-dependent diabetes mellitus

Person suffered from insulin-dependent diabetes mellitus

Person suffered from thyrotoxicosis

Patient, aged 26, who suffered from hypoglycemic coma resulted from insulin overdosage, was intravenously infused with 20% solution of glucose. After this manipulation patient's condition improved. What process helps glucose enter the cell?

Active transport

Osmotic transport

Pinocytosis

Secretion

Phagocytosis

A 40-years-old man is suffered from diabetes mellitus. After he has endured tonsillitis, reinforcement of thirst, nausea, vomiting, abdominal pain, and sleepiness develop in him. Patient's BP is 80/45 mmHg, pulse rate 125 b/pm, and his skin is dry. Content of glucose in blood is 28 mmol/L. What complication of diabetes mellitus in this patient?

Hyperosmolar coma

Lactic acidosis

Diabetic ketoacidosis

Hepatic coma

Hypoglycemic coma

After the break of diet (taking the easy for assimilation carbohydrates) in a woman, who has been suffering from diabetes mellitus for a long time, general malaise and increase of blood pressure gradually develop and hallucinations and cramps appear. Woman has dry skin and signs of dehydration. What is the reason for worsening of patient's condition?

Hyperosmolar hyperglycemic coma

Hypoglycemic coma

Diabetic ketoacidosis

Heart failure

Respiratory failure

During the experiment rat was injected with 5% alloxan solution in dose 200ng per kg of rat weight. What kind of pathology arises in this case?

Diabetes mellitus

Arterial hypertension

Acute renal failure

Diabetes insipidus

Hepatic failure

One –year infant lags in mental development from infants of the same age. The infant has vomiting, craps, and loss of consciousness in the mornings. What enzyme deficiency these changes are connected to?

Glycogen syntase

Phosphorylase

Arginase

Saccharase

Lactase

In patient with constant hypoglycemia blood analysis does not change after injection of adrenalin. A doctor supposes hepatic disorder. What function disorder it is?

Glycogen deposition

Cholesterol formation

Excretion

Glycolysis

Ketogenesis

A woman, aged 58, was admitted to the hospital in severe condition. She has confused consciousness; dry skin, hollow eyes, cyanosis, and scent of rotten appies from her mouth. At laboratory examination of her: glucose in blood – 15.1 mmol/L, glucose in urine – 3.5%. What is the most possible reason for this condition?

Hyperglycemic coma

Hypoglycemic coma

Hypovolemic coma

Uremic coma

Anaphylactic shock

A doctor reveals in child symmetric roughness on cheeks, diarrhea, and disorders of neural activity. What nutrition factors deficit underlies this condition?

Nicotine acid, tryptophan

Methionine, lipoic acid

Lysine, ascorbic acid

Threonine, pantothenic acid

Phenylalanine, pangamic acid

The most of participants of Magellan expedition to America died of avitaminosis.

This disease displays as general malaise, subcutaneous hemorrhage, pulling teeth out, hemorrhage from gums. What is the name for this avitaminosis?

Scurvy

Pellagra

Addison-Birmer’s anaemia

Polyneuritis (beriberi)

Rachitis