CLINICAL TASKS

Supporting and Locomotor Apparatus

To what anatomical formation is it necessary to press a common carotid artery to stop bleeding:
- anterior tubercle of transverse process of VI cervical vertebra;
+ body of VII cervical vertebra;
- anterior tubercle of transverse process of V cervical vertebra;
- transverse process of VII cervical vertebra;
- posterior tubercle of transverse process of VI cervical vertebra.

A 12-month-old normally developed child can hold a head, sit and stand. What curvatures of vertebral column were formed:
+ cervical, thoracic, lumbar and sacral;
- thoracic and sacral;
- cervical and lumbar;
- thoracic and lumbar;
- cervical, thoracic and sacral?

What part of the vertebral column was injured if the blood supply to the posterior part of the brain is disturbed:
+ cervical part;
- thoracic part;
- lumbar part;
- sacral part;
- coccygeal part?

A spinal hernia (protrusion of a spinal cord) is determined in the region of XII thoracic vertebra. Nonfusion of what anatomic formation was the cause of the spinal hernia:
+ arch of a vertebra;
- body of a vertebra;
- intervertebral disk;
- articular processes;
- spinous processes?

Nonfusion of arches of III and IV lumbar vertebrae was revealed on X-ray film. What fusion anomaly is this:
+ spina bifida;
- kyphosis;
- palatum fissum;
- lordosis;
- scoliosis?

A 10-year-old child has a flexure of the thoracic part of the vertebral column to the left. What can be diagnosed in the patient:
+ left side thoracic scoliosis;
- cervical kyphosis;
- right side lumbar scoliosis;
- thoracic lordosis;
- lumbar lordosis?

A boy jumped from a tower in water and had hit on a stone in the lower region of the sternum. Fracture of what formation of the sternum has taken place:
+ xiphoid process;
- handle of the sternum;
- angle of the sternum;
- body of the sternum;
- acinaciform process?

A patient has received a trauma in the region of the handle of the a sternum in a road accident. What ribs are damaged:
+ I – II ribs;

- III – IV ribs;
- V – VI ribs;
- I – III ribs;
- IX – X ribs?

A patient had pneumonia after which the pleuritis has developed. How to perform a pleurocentesis:

+ by insertion of aspirating needle on the superior edge of a rib;
- by insertion of aspirating needle on the inferior edge of the rib;
- by insertion of aspirating needle between spinous processes of thoracic vertebrae;
- by insertion of aspirating needle between transverse processes of thoracic vertebrae;
- by insertion of aspirating needle between articulate processes of thoracic vertebrae?

As a result of a road accident there was a fracture of 3 – 4 – 5 ribs on the right side in the middle part of the ribs. What parts of ribs have undergone trauma:

+ bodies of ribs;
- necks of ribs;
- heads of ribs;
- articular processes of ribs;
- crests of ribs?

During medical examination of the patient a flat shape of a thoracic cage has been found out. What type of body build is such shape specific for:

+ dolichomorphic;
- brachimorphic;
- dolichocephal;
- brachicephal;
- mesomorphic?

In man, on the right side in the area of the inferior angle of scapula there are determined fractures of ribs. What ribs have been damaged:

+ VI – VII;
- VIII – IX;
- X – XI;
- XI;
- I – III?

After a road accident a patient had fractures of bones at the region of the deltoid muscle. What parts of bones have trauma:

+ the superior third of the humerus and acromion of the scapula;
- the superior third of metatarsal the humerus and a coracoid process;
- the acromial end of the clavicle and infraspinatus fossa;
- acromion and the inferior third of the humerus;
- acromion and tubercles of the a humerus?

After falling on the right hand adducted to a trunk the victim has a fracture of the superior third of the right arm. What bones hase been injured:

+ humerus;
- sternum;
- scapula;
- clavicle;
- ribs?

A patient has been delivered to a hospital with fracture of the humerus. What part of the humerus is most frequently injured:

+ in the region of surgical neck;
- in the region of lateral epicondyle;
- in the region of the body;
- in the region of anatomical neck;
- in the region of the head of the humerus?

The most often fractures of bones happen in the region of the surgical neck. Specify where the surgical neck is located:

+ humerus;

- radius;
- femur;
- fibula;
- talus.

Why do fractures of the distal epiphysis of the humerus happen more often in children:

+ since there is a cartilage between the epiphysis and diaphysis (the uncompleted ossification);
- due to the weakness of ligaments;
- due to insufficient blood supply;
- due to the underdevelopment of the capsule of the joint;
- due to delicacy of surrounded muscles.

A patient has an abruption of medial humeral epicondyle resulting in disturbance of innervation. ***What nerve was damaged:***

+ ulnar nerve;
- interosseal nerve;
- radial nerve;
- median nerve;
- radial nerve?

A patient has an injury in the region of the middle third of the humerus; ***thus the extension of the forearm is affected***. ***What bone formation is injured:***

+ groove of the radial nerve;
- groove of the biceps brachii muscle;
- groove of the median nerve;
- groove of the humeral nerve;
- groove of the ulnar nerve?

After a fall on the right arm, the man has felt a severe pain in the region of a posterior part of the elbow joint. ***What process and what bone have undergone trauma:***

+ olecranon of the ulna;
- radial process of the radius;
- styloid process of the ulna;
- coronoid process of the ulna;
- radial process of the radius?

A trauma was received in the region of the middle of the lateral part of the forearm. ***What bone and what its part hav undergone trauma:***

+ diaphysis of the radius;
- apophysis of the radius;
- apophysis of the ulna;
- epiphysis of the ulna;
- diaphysis of the ulna?

A fracture of laterally situated bone of the forearm in the inferior third is found out on X-ray film. ***What bone of the forearm and what its part are fractured:***

+ radius, an epiphysis;
- ulna, metaphysis;
- ulna, an epiphysis;
- ulna, a diaphysis;
- radius, a diaphysis?

A trauma was received in the region of the medial part of the wrist. ***Which of the wrist bones has, most likely, undergone trauma:***

+ pisiform;
- cuboid;
- capitate;
- trapezoid;
- scaphoid?

After a road accident, there was a trauma in the region of the posterior part of the lesser pelvis. ***What bone formations of a lesser pelvis have undergone trauma:***

+ sacrum;

- coccyx;
- ischium;
- ilium;
- pubic bone?

After a road accident a woman had a trauma in the region of the anterior part of the hip bone. Which bone of the pelvis is injured:

+ pubic;
- ischium;
- ilium;
- sacral;
- femur?

An obstetrician has measured the distance between two superior anterior iliac spines in the pregnant woman. What size of the big pelvis has been determined:

+ distantia spinarum;
- distantia cristarum;
- distantia trochanterica;
- conjugata vera;
- conjugata anatomica?

After a foll, a 70-year-old man had a fracture of a femur. What is the most frequent place of fracture of this bone at the given age:

+ neck of femur;
- superior third of femur;
- body of femur;
- greater trochanter;
- inferior third of femur?

78-year-old woman has traumatized the upper segment of free lower limb after falling. What bone was traumatized:

+ femur;
- fibula;
- tibia;
- talus;
- calcaneus?

A patient got trauma on the medial side of the superior third of the leg. Which the bones of the leg and what its part are injured:

+ metaphyseal zone of the tibia;
- diaphysis of the fibula;
- metaphyseal zone of the fibula;
- diaphysis of the tibia;
- apophysis of a tibia?

A man got trauma in the result of the direct impact on the internal surface of the middle third of the shin. Fracture of what anatomic formation is the most possible:

+ diaphysis of the tibia;
- distal epiphysis of the fibula;
- distal epiphysis of the tibia;
- proximal epiphysis of the tibia;
- proximal epiphysis of the fibula?

A patient complains on a pain in the region of the medial side of the dorsum of the foot. What tarsal bones fracture is the most probable in this case:

+ navicular;
- calcaneus;
- cuboid;
- lateral cuneiform;
- talus?

There is only one ossification center within femoral head on the radiograph. How old is a child:

+ 1 year-old;

- 8 years-old;
- 5 years-old;
- 15 years-old;
- 7 years-old?

An ossification center in lateral cuneiform bone is revealed on the radiograph of the child foot. How old is the child:

+ 1 year-old;
- 5 year-old;
- 8 year-old;
- 15 year-old;
- 7 year-old?

A football player got the trauma of the kneejoint. X-ray examination revealed a fracture of the bone placed within a tendon of the quadriceps femoris muscle. What kind of bone is it:

+ sesamoid;
- tubular;
- flat;
- pneumatic;
- mixed?

In posterior superior part of the head, there is a scalped wound. What bones are damaged:

+ parietal and occipital bones;
- sphenoid and lacrimal bones;
- ethmoid bone and mandible;
- frontal and nasal bones;
- temporal bone and maxilla?

The lacrimal gland together with the bone, on which it is lying, was damaged in a road accident. What bone was damaged:

+ frontal;
- maxilla;
- lacrimal;
- nasal;
- ethmoid?

The line of the fracture of the skull base passes through the round spinous foramina. What bone is injured as a result of trauma:

+ sphenoid;
- temporal;
- frontal;
- ethmoid;
- occipital?

At the X-ray film of the skull the fracture line passes a border of a temporal and occipital bones. What aperture is injured as a result of trauma:

+ jugular;
- stylomastoid;
- mastoid;
- condyloid;
- foramen magnum?

In the patient, during an inflammation of a middle ear, the innervation of the muscles of facial expression is damaged. What canal is involved in the process:

+ facial nerve canal;
- tympanic canal;
- mastoid canal;
- canalis musculotubarius;
- chorda tympany canal?

What anatomic formation can infection penetrate through into the tympanic cavity from nasopharynx:

+ semicanalis tubae auditive;

- canaliculus tympanicus;
- semicanalis m. tensor tympani;
- canaliculus caroticotympanicus;
- canalis caroticus?

As a result of infection in nasopharynx, the otitis has developed in the child. What canal has the infection penetrated through into a tympanic cavity:

+ musculotubarius;
- carotico-tympanic;
- carotid;
- facial;
- chorda tympani?

A right-side fracture of middle third of the mandible is revealed in the victim. What canalis injured:

+ mandibular;
- greater palatine;
- pterygoid;
- infraorbital;
- lesser palatine?

As a result of trauma of the maxilla, a numbness is marked in the region of the molars and gum. Which of the listed formations is damaged:

+ alveolar foramens of the maxilla;
- infraorbital canal;
- ethmoid aperture of the maxilla;
- infraorbital foramen of the maxilla;
- supraorbital foramen of the maxilla?

A man cannot move the mandible, eat and talk because of a pain in the region of a temporomandibular joint. What osteal formation is damaged:

+ condyloid process of the mandible;
- coronal process of the mandible;
- styloid process of the temporal bone;
- mastoid process of the temporal bone;
- zygomatic process of a temporal bone?

At a purulent highmoritis (inflammation of the maxillary air sinus mucosa) the puncture for washing the sinus is made through:

+ the region of a middle nasal meatus;
- the infraorbital foramen;
- the major palatine canal;
- the region of the superior nasal meatus;
- the nasolacrimal canal.

A patient suffers from the frontal sinusitis. What department of the nasal cavity may infection spread from in a frontal sinus:

+ from the middle nasal meatus;
- from the sphenoethmoid recess;
- from the superior nasal meatus;
- from the inferior nasal meatus;
- from vestibule of the nasal cavity?

The inflammation of a sphenoid sinus is observed at the patient. Where does its aperture open:

+ meatus nasi superior;
- frontal air sinus;
- meatus nasi medius;
- meatus nasi inferior;
- meatus nasi communis?

The patient's nasal cavity contains abundance of mucus that covers nasal mucosa and blocks olfactory receptors. Where are they located:

+ superior nasal concha;
- middle nasal concha;

- inferior nasal concha;
- common nasal meatus;
- inferior nasal meatus.

A patient suffers from frontitis and highmoritis (inflammation of the paranasal sinuses mucosa). Where does the exudation from these sinuses discharge to:

+ middle nasal meatus;
- superior nasal meatus;
- inferior nasal meatus;
- nasal vestibule;
- nasolacrimal canal?

A patient with chronic rhinitis (inflammation of the nasal mucosa) has the inflammation of maxillary sinus mucosa. What formation has the infection been spread through:

+ semilunar hiatus;
- ethmoid infundibulum;
- sphenopalatine foramen;
- sphenoethmoid recess;
- ethmoid air cells?

A patient with chronic rhinitis (inflammation of the nasal mucosa) has the inflammation of frontal sinus mucosa. What formation has the infection spread through:

+ ethmoid infundibulum;
- semilunar hiatus.;
- sphenopalatine foramen;
- sphenoethmoid recess;
- ethmoid air cells?

A doctor has detected the discharge of pus from the left middle nasal meatus during nasal examination. Inflammation of which sinuses can be supposed in this situation:

+ maxillary, frontal, anterior and middle ethmoid air cells;
- maxillary and sphenoid;
- frontal, sphenoid, anterior and posterior ethmoid air cells;
- anterior, middle and posterior ethmoid air cells;
- sphenoid, posterior ethmoid air cells?

During street fight a young man got fracture of the anterior part of the nasal septum. Which of bones forming the septum has been damaged:

+ ethmoid;
- nasal;
- vomer;
- palatine;
- rostrum of the sphenoid bone?

As a result of the nasal trauma the woman lost the sense of smell. What bones of a skull have been traumatised:

+ ethmoid;
- frontal;
- zygomatic;
- temporal;
- sphenoid?

In the patient an inflammation of a nasal mucosa has become complicated by the inflammation of an eye conjunctiva. What anatomic formation has an infection penetrated through:

+ nasolacrimal canal;
- sphenopalatine foramen;
- hiatus semilunaris;
- greater palatine canal;
- lesser palatine canal?

As a result of trauma of the right orbit the impairment of movement of the right eyeball is observed. What from the listed formation is damaged:
+ superior orbital fissure;
- inferior orbital fissure;
- optic canal;
- anterior occipital aperture;
- posterior ethmoid aperture?

In the patient the complete blindness has occured after a road accident. What canal and nerve have been damaged:
+ optic canal and an optic nerve;
- superior orbital fissure and an optic nerve;
- inferior orbital fissure and an optic nerve;
- optic canal and an orbital branch of a trigeminal nerve;
- superior orbital fissure and an optic canal?

As the result of trauma of the eye, there was a festering of soft tissues of an orbit. Through what anatomic formation can pus distribute into the pterygopalatine fossa:
+ the inferior orbital fissure;
- the round foramen;
- the zygomatico-orbital foramen;
- sphenopalatine foramen;
- the superior orbital fissure?

As a resalt of purulent otitis the superior wall of a tympanic cavity has been damaged. In what fossa of a skull has the pus from the tympanic cavity distriduted:
+ in the middle cranial fossa;
- in the orbit;
- in the pterygopalatine fossa;
- in the anterior cranial fossa;
- in the posterior cranial fossa?

In a patient a fracture of the central part of a roof of a skull has been revealed on the X-ray film. Which of bones of the skull is damaged:
+ parietal;
- sphenoid;
- occipital;
- temporal;
- frontal?

As a result of road accident there was a damage of the hypophysis and the central part of the base of the skull. Which of bones has been damaged:
+ spheniod;
- frontal;
- temporal;
- parietal;
- ethmoid?

How can inflammatory process spread from the occipital region into the cranial cavity:
+ via condyloid canal;
- via parietal foramen;
- via mastoid foramen;
- via foramen spinosum;
- via foramen ovale?

Dissolution of the orbital wall may happen as a result of a purulent inflammation of the maxilla. The orbital wall can dissolve:
+ inferiorly;
- superiorly;
- medially;
- laterally;

- posterior?

Inflammation of the tympanic mucosa was complicated by the inflammation of the cerebral meninges. Through which tympanic wall may infection penetrate into the cranial cavity:

+ superior;
- inferior;
- lateral;
- medial;
- posterior?

What is the most probable source of spreading purulent inflammation into mastoid cells:

+ tympanic cavity;
- sterno-cleido-mastoid muscle;
- diploe of the occipital bone;
- subcutaneous fatty tissue;
- middle cranial fossa?

Which of listed below is the most probable channel for spreading infection from pterygopalatine fossa:

+ orbit;
- subaponeurotic space;
- tympanic cavity;
- frontal sinus;
- interpterygoid space?

MYOLOGY

A disturbance of eyelids closure is detected in patient during the examination. What muscle damage can be suspected:

+ m. orbicularis oculi;
- m. procerus;
- m. orbicularis oris;
- m. corrugator supercilii?

During the examination the patient cannot round the lips and whistle, oral fissure stretches to the sides (a transversal smile). What muscle atrophy do these symptoms point out:

+ orbicularis oris muscle;
- zygomatic major muscle;
- buccinator muscle;
- masseter muscle;
- risorius muscle?

A patient's cheek was deeply cut with dental instrument during the treatment of an upper second premolar tooth. What muscle is damaged:

+ buccinator muscle;
- masseter muscle;
- orbicularis oris muscle;
- greater zygomatic muscle;
- mylohyoid muscle?

A patient cannot lift the lowered mandible. What muscles cannot function:

+ masseter muscle;
- levator angulis oris muscle;
- orbicularis oris muscle;
- muscles of the facial expression;
- epicranial muscle?

An old patient was delivered to the emergency department with a wound in the posterior region of his neck (region nuchae). What muscle does this area occupy:

+ trapezius;
- scalenus posterior;
- sternocleidomastoideus;
- latissimus dorsi;

- rhomboideus?

An old patient was delivered to the emergency ward with a wound in his neck within a triangle bounded by m. trapezius posteriorly. Within what triangle should operation be performed:

+ trigonum omotrapezoideum;
- trigonum omoclaviculare;
- trigonum omotracheale;
- trigonum caroticum;
- trigonum submandibulare?

An abscess is detected in the posterior wall of a pharynx in the patient after the examination. What is the most probable way of spreading the inflammatory process:

+ through the retrovisceral space to the posterior mediastinum;
- through the retrovisceral space to the anterior mediastinum;
- through the previsceral space to the posterior mediastinum;
- through the previsceral space to the anterior mediastinum;
- through the interaponeurotic space to the posterior mediastinum?

A doctor has established the diagnosis to a patient after the examination: a retropharyngeal abscess. What interfascial spaces the purulent inflammation can be spread to:

+ posterior mediastinum;
- anterior mediastinum;
- suprasternal interfascial space of the neck;
- anterior fascial space of the neck;
- posterior fascial space of the neck?

The massage of the muscle antagonist to abduction is necessary because of the difficult abduction of an arm. What muscle's region massage should the doctor prescribe:

+ latissimus dorsi muscle;
- brachial muscle;
- deltoid muscle;
- trapezius muscle;
- biceps brachii muscle?

A conductor of an orchestra cannot get a handkerchief out from a back pocket of the trousers. What muscle does not carry out the function:

+ latissimus dorsi muscle;
- rhomboid muscle;
- deltoid muscle;
- pectoralis major muscle;
- trapezius muscle?

A patient cannot abduct the upper limb. What muscle does not carry out the function:

+ deltoid muscle;
- teres major muscle;
- infraspinatus muscle;
- teres minor muscle;
- latissimus dorsi muscle?

A diagnosis of diaphragmatic hernia has been put to a patient. What are the weak spots distinguished in a diaphragm:

+ sternocostal and lumbocostal triangles;
- lumbar part;
- tendinous center;
- sternocostal and sternolumbar triangles;
- sternolumbar and lumbocostal triangles?

A patient has pain along one of muscles of the trunk on the same side during the rotating movements in the vertebral column. What muscle inflammation (myositis) is observed:

+ internal oblique abdominal muscle;
- external oblique abdominal muscle;
- rectus abdominis muscle;

- quadratus lumborum muscle;
- transverse muscle of abdomen?

In sequence of muscular layers of the anterior abdominal wall there is made an incision for appendectomy* (*removing the vermiform process*)*:

+ external oblique abdominal muscle, internal oblique abdominal muscle, transverse muscle of abdomen;
- transverse muscle of abdomen, external oblique abdominal muscle, internal oblique abdominal muscle;
- internal oblique abdominal muscle, transverse muscle of abdomen, external oblique abdominal muscle;
- rectus abdominis muscle, external oblique abdominal muscle, internal oblique abdominal muscle;
- external oblique abdominal muscle, internal oblique abdominal muscle, rectus abdominis muscle.

A patient has a dislocation of the shoulder joint with displacement of the head of the humerus upwards and forward*. *What muscle tendon can be damaged:

+ long head of biceps brachii;
- short head of biceps brachii;
- long head of triceps brachii;
- brachialis;
- coracobrachial?

A victim has a gunshot wound of the anterior wall of the axillary fossa. Which muscles can be damaged thus:

+ greater and lesser pectoral muscles;
- deltoid and coracobrachial muscles;
- biceps brahii and brahialis muscles;
- serratus anterior and subscapular muscles;
- teres major and minor muscles?

A function of the posterior group of muscles of the upper arm was broken in the victim as a result of a trauma*. *What functional disturbance of an elbow joint will arise:

+ extension;
- pronation;
- flexion;
- supination;
- rotation?

A worker has received deep cut wound of an anterior surface of the right upper arm. The muscles are injured. What muscles has the surgeon to put sutures on:

+ biceps brachii and brachial muscles;
- lateral and medial heads of the triceps brachii muscle;
- coracobrachial and brachial muscles;
- brachial and anconeus muscles;
- brachial and brachioradial muscles?

A fracture of the radial bone is below the place of attachment of the pronator teres muscle in the injured patient*. *Where is the proximal fragment displaced:

+ backward;
- forward;
- inward;
- outward;
- sharp displacement is possible?

The patient cannot extend the arm in an elbow joint after an injury*. *What basic muscle function disturbance can it cause:

+ musculus triceps brachii;
- musculus infraspinatus;
- musculus levator scapulae;
- musculus teres major;
- musculus subscapularis?

As a result of an open fracture, the anterior group muscles of a forearm are damaged by the bone splinters*. *What functional disturbance of a radiocarpal joint will arise:

+ flexion of the hand;

- extension of the hand;
- abduction of the hand;
- adduction of the hand;
- rotation of the hand?

A victim has a damage of the 4th synovial sheath of the hand because of the blow by a dorsum of the hand with a sharp object. Which muscles' tendons have received the trauma:

+ extensor digitorum muscle;
- extensor carpi ulnaris muscle;
- extensor carpi radialis muscle;
- flexor digitorum profundus muscle;
- brachioradialis muscle?

A patient, 32-years-old with affection of an ulnar nerve cannot adduct to a median line the II and IV fingers. What muscles function is broken:

+ palmar interosseous muscles;
- dorsal interosseous muscles;
- lumbrical muscle;
- palmaris brevis muscle;
- abductor digiti minimi muscle?

During the examination of the patient, there was detected the cut wound in a thenar region of the right hand; distal phalanx of the thumb does not flex. What muscle is damaged:

+ flexor pollicis longus muscle;
- adductor pollicis muscle;
- flexor pollicis brevis muscle;
- abductor pollicis brevis muscle;
- opponens pollicis muscle?

During the examination of the patient there was detected the cut wound in a thenar region of the left hand, the proximal phalanx of the thumb does not flexs. What the muscle is damaged:

+ flexor pollicis brevis muscle;
- opponens pollicis muscle;
- flexor pollicis longus muscle;
- abductor pollicis brevis muscle;
- adductor pollicis muscle?

A crack of the posterior surface of the shaft of the humerus is diagnosed at the patient. There are signs of injury of the radial nerve canal. What formations does this canal compose:

+ posterior surface of the humerus and m. triceps brachii;
- anterior surface of the humerus and m. biceps brachii;
- anterior surface of the humerus and m. coracobrachialis;
- anterior surface of the humerus and m. brachialis;
- posterior surface of the humerus and m. anconeus?

How is the median cubital vein (widespread place of intravenous injections) fixed within a cubital fossa:

+ by biceps brachii aponeurosis;
- by brachial muscle;
- by triceps brachii tendon;
- by brachioradialis muscle;
- by anconeus muscle?

Paronychia of the little finger has been complicated by phlegmona of the hand and forearm. Purulent process was distributed to:

+ vagina synovialis communis mm. flexorum;
- vagina tendinis m. flexor carpi radialis;
- vagina tendinis m. flexor pollicis longi;
- canalis carpalis;
- interfascial spaces?

A patient cannot perform the abduction of a thigh because of the pain in the gluteal region. What muscle has suffered because of the injury:

+ gluteus minimus and medius muscles;
- gluteus maximus muscle;
- periformis;
- iliopsoas muscle;
- quadratus femoris muscle?

A function of the thigh flexion in a hip joint was broken during the closed trauma of the abdominal cavity. What muscle has suffered because of the trauma:

+ iliopsoas muscle;
- quadratus femoris muscle;
- rectus abdominis muscle;
- externus abdominis muscle;
- transverses abdominis muscle?

A victim can't extend the leg after gunshot. What muscle is damaged:

+ quadriceps femoris;
- biceps femoris;
- sartorius;
- gracilis;
- popliteus?

What movement would be affected by trauma of medial muscles of the thigh:

+ adduction of the thigh;
- abduction of the thigh;
- flexion of the thigh;
- extension of the thigh;
- supination of the thigh?

Sciatic nerve lesion results in paralysis of the posterior thigh muscles. What function would be affected:

+ flexion of the leg and extension of the thigh;
- flexion of the thigh;
- extension of the leg;
- rotation of the thigh laterally;
- rotation of the leg medially?

A patient has the cut wound on the posterior surface of the thigh. He cannot flex the leg. What muscles are damaged:

+ semitendinous, semimembranous and biceps femoris;
- biceps femoris, adductor and gracilis;
- semitendinous adductor and gracilis;
- semitendinous, semimembranous and gracilis;
- biceps femoris, gracilis and adductor?

A patient complains of impossibility of leg extension in a knee joint after the falling. What muscle is injured:

+ quadriceps femoris;
- semimembranous;
- semitendinous;
- biceps femoris;
- triceps surae?

A patient complains of an acute pain above the region of the heel and impossibility to lift a body standing on tiptoe after a trauma of the lower leg. What muscle tendon is damaged:

+ triceps surae muscle;
- tibialis posterior muscle;
- tibialis anterior muscle;
- peroneus brevis muscle;
- peroneus longus muscle?

Because of trauma a victim had intense pain and swelling of anterior surface of a leg. Dorsiflexion of the foot is laboure. Which muscle function is disrurbed:

+ m. tibialis anterior;

- m. flexor hallucis longus;
- m. flexor digitorum longus;
- m. peroneus brevis;
- m. peroneus longus?

The fracture of the medial malleolus of the tibia with a damage of muscle tendons of the leg have been found out um the patient after the trauma. What muscle tendons have suffered:

+ posterior tibial muscle, flexor hallucis longus, flexor digitorum longus;
- long and short peroneus muscles;
- interior tibial muscle, extensor hallucis longus, extensor digitorum longus;
- triceps surae and plantaris muscles;
- extensor hallucis brevis, extensor digitorum brevis?

A sportsman has the rupture of Achilles' tendon. Define what muscle is damaged:

+ anterior tibial;
- triceps surae muscle;
- posterior tibial;
- peroneus longus;
- biceps femoris muscle?

The anterior group of muscles of the leg were damaged because of fracture of the tibia. What muscles' function can be broken:

+ extensor hallucis longus muscle;
- peroneus longus muscle;
- flexor digitorum longus;
- soleus muscle;
- extensor digitorum brevis muscle?

A female patient has a deep cut wound on the dorsum of the foot caused by the edge of a fallen pane. What muscles' tendons can be suffered because of the trauma:

+ extensor digitorum longus and brevis muscle;
- plantaris muscles;
- peroneus longus muscle;
- peroneus brevis muscle;
- flexor digitorum longus muscle?

SPLANCHNOLOGY

1. The parents of new born child addressed to a pediatrist with complaints of urine excretions from the navel. What congenital abnormality did the child get?

+ Non closed urachus.
– Meckel's diverticulum.
– Urethral splitting.
– Umbilical cyst.
– Inguinal cyst.

2. The damage of kidney parenchyma was caused by devascularization in the system of segmental artery. How many segmental arteries are in the right kidney in the norm?

+ 5.
– 4.
– 3.
– 7.
– 6.

3. The damage of kidney parenchyma was caused by devascularization in the system of arteries passing through the renal column. Name these arteries.

+ Interlobar.
– Segmental.
– Interlobular.

– Arcuate.
– Renal.

4. A patient died from acute edema of kidney parenchyma. What capsule of the kidney will be hardly separated from renal parenchyma during pathoanatomical autopsy?

+ Fibrous capsule.
– Renal fascia.
– Adipose capsule.
– Retroperitoneal fascia.
– Preperitoneal fascia.

5. During the operation a stone with 3 horn shaped processes was removed from the renal pelvis. What anatomical formations do these processes correspond?

+ Greater calyces.
– Lesser calyces.
– Nephrons.
– Renal pelvis.
– Lobules.

6. The radiograph of left kidney shows a renal pelvis into which lesser calyces drain, greater calices are absent. Specify the type of excretory ways of the kidney.

+ Embryonal.
– Phylogenetic.
– Foetal.
– Mature.
– Ontogenetic.

7. A doctor diagnosed falling of right kidney at the patient with an acute weight loss. Which of the fixation apparatus of kidneys becomes weaker?

+ Capsula adiposa.
– Arteria et vena renalis.
– Capsula fibrosa.
– Perinephrium.
– Fascia endoabdominalis.

8. A pathologist performed the autopsy revealed congenital absence of one kidney. What did the doctor diagnose?

+ Agenesia renis.
– Ren duplex.
– Distopia renis.
– Ren arcuata.
– Ren anularis.

9. During a surgical operation it is necessary to press a renal artery. What is the sequence of the elements of renal stalk in its hilus from posterior to anterior one?

+ Ureter, artery, vein.
– Artery, vein, ureter.
– Artery, ureter, vein.
– Vein, ureter, artery.
– Vein, artery, ureter.

10. The falling of left kidney (nephroptosis) is observed at the patient. What is the normal position of the left kidney according to the 12th rib?

+ 12 th rib crosses a kidney in the middle.

– 12 th rib is projected on the superior pole.
– 12 th rib crosses a kidney in the superior third.
– 12 th rib crosses a kidney in the inferior third.
– 12 th rib is projected on the inferior pole.

11. A patient has the right abnormal kidney descent (nephroptosis). What is the normal position of the right kidney according to the 12th rib?

+ The 12th rib crosses a kidney in the superior third.
– The 12th rib crosses a kidney in the inferior third.
– The 12th rib crosses a kidney in the middle.
– The 12th rib is projected on the superior pole.
– The 12th rib is projected on the inferior pole.

12. A patient has left floating kidney (ren mobile). At what level is the left kidney related to a vertebral column in the norm?

+ From the middle of the 11th thoracic vertebra to the superior edge of the 3rd lumbar one.
– From inferior edge of the12th thoracic vertebra to the superior edge of the 2 nd lumbar one.
– From inferior edge of the 11th thoracic vertebra to the middle of the 4th lumbar one.
– From the middle of the 11th thoracic vertebra to the superior edge of the 4th lumbar one.
– From inferior edge of the 12th thoracicvertebra to the middle of the 3rd lumbar one.

13. A patient has right floating kidney (ren mobile). At what level is the right kidney related to a vertebral column in the norm?

+ From inferior edge of the 11 th thoracic vertebra to the middle of the 3 nd lumbar vertebras.
– From inferior edge of the 12 th thoracic to the middle of the 4 th lumbar one.
– From inferior edge of 11 thoracic to the superior edge of 1 lumbar one.
– From inferior edge of the 12 th thoracic vertebra to the superior edge of the 2 nd lumbar one.
– From the middle of the 11 th thoracic vertebra to the superior edge of the 3 rd lumbar one.

14. During removing the concrement (stone) from the right ureter a surgeon cut the wall of ureter. What anatomical formation will the urine get in?

+ Retroperitoneal space.
– Right mesenteric sinus.
– Rectovesical excavation.
– Prevesical space.
– Right paracolic gutter.

15. During operation of the left ureter it was revealed that the tumor extended to the mesentery of small intestine. What part of ureter is affected with the tumor?

+ Abdominal.
– Intraorganic.
– Pelvic.
– Intrarenal.
– Diaphragmatic.

16. The stone at the place of transition of the left renal pelvis into ureter was revealed. What structure is located anteriorly to the initial part of the left ureter?

+ Duodenojejunal flexure .
– Sigmoid colon.
– Stomach.
– Ileum.
– Spleen.

17. During removing right ovary a surgeon instead of ovarian artery bandaged organ adjacent. Which one?

+ Ureter.
– Thoracic duct.
– Aorta.
– Common iliac artery.
– Internal iliac artery.

18. The patient has obstruction of right ureter by stone between its abdominal and pelvic parts. What is anatomical border between these two parts?

+ Linea terminalis.
– Linea semilunaris.
– Linea arcuata.
– Linea transversa.
– Linea inguinalis.

19. Urolithiasis was complicated with the exit of the stone from the kidney. At what level of ureter can it stop?

+ On the border between abdominal and pelvic parts.
– 2 cm superiorly to the inflow into the urinary bladder.
– In the renal pelvis.
– In middle abdominal part.
– 5 cm superiorly to pelvic part.

20. The patient has the stone at the place of transition of right renal pelvis into the ureter. Behind what structure is the initial part of the right ureter located?

+ Pars descendens duodeni.
– Colon ascendens.
– Flexura coli dextra.
– Pars superior duodeni.
– Pars horizontalis duodeni

21. During the cystoscopy a doctor revealed changes of mucous membrane of urinary bladder at the place of triangle. In what part of urinary bladder is this triangle located?

+ Fundus.
– Body.
– Isthmus.
– Apex.
– Column.

22. During the operation it was revealed that the tumor of prostate grew into urinary bladder. What compartment of urinary bladder is damaged?

+ Neck.
– Apex.
– Fundus.
– Body.
– Triangle.

23. A man has tumor of posterior wall of urinary bladder. What organs can be engaged into the process?

+ Rectum, seminal vesicles, ampule of ductus deferens.
– Rectum, prostate gland.
– Prostate gland.
– Male urethra.
– Cowper's (bulbourethral) glands.

24. The examination of the patient revealed the obstruction of urethra which was caused by pathology of organ surrounding it. What is this organ?

+ Prostate gland.
– Spermatic cord.
– Testicles.
– Seminal vesicles.
– Epidydimis.

25. During the operation it was revealed that tumor from the prostate grew into to the middle compartment of urethra. What is this compartment?

+ Membranous.
– Lacunar.
– Prostatic.
– Spongy.
– Cavernous.

26. During the examination of a newborn boy it was revealed that the external urethral orifice is in the lower surface of penis. What is developmental anomaly is it?

+ Hypospadias.
– Hermaphroditism.
– Epispadias.
– Monorchism.
– Cryptorchism.

27. During the examination of a man it was revealed that the external urethral orifice is located above the anterior surface of penis. What developmental anomaly is it?

+ Epispadias.
– Paraphimosis.
– Phimosis.
– Hermaphroditism.
– Hypospadias.

28. A doctor made the bacterial inoculation from the male urethra and took mucus from the navicular fossa. In what part of urethra is this fossa located?

+ Spongy.
– Cavernous.
– Prostatic.
– Membranous.
– Bulbar.

29. During the catheterization of male urethra the mucous membrane was injured. What part of urethra was injured?

+ Pars membranacea.
– Pars cavernosa.
– Pars spongiosa.
– Pars prostatica.
– Pars bulbaris.

30. The catheterization of urinary bladder was indicated to the patient with adenoma of prostate. What is the sequence of passing catheter through the parts of urethra?

+ Spongy, membranous, prostatic.
– Membranous, prostatic, spongy.
– Spongy, prostatic, membranous.

– Membranous, spongy, prostatic.
– Prostatic, membranous, spongy.

31. At the 2 years old boy a scrotal hernia was diagnosed. What testicular membrane abnormality caused this pathology?

+ Tunica vaginalis testis.
– Tunica dartos.
– Fascia cremasterica.
– Fascia spermatica externa.
– Fascia spermatica interna.

32. At the man the spermatogenetic epithelium of testes is damaged; as a result the sperm cells are absent in a semen. What compartment of semen excretory ways is damaged?

+ Convoluted seminiferous tubules.
– Straight seminiferous tubules.
– Rete testis.
– Ductus epidydimis.
– Ductus deferens.

33. At a man the inflammation of testes was complicated by hydrocele. Which of testes coats will a surgeon cut the last during an operation?

+ Lamina parietalis tunicae vaginalis testis.
– Fascia spermatica interna.
– Tunica dartos.
– Musculus cremaster.
– Fascia spermatica externa.

34. At examination of a newborn a surgeon revealed the absence of the left testis in a scrotum (monorchism). At what age are the testes in the scrotum in a norm?

+ To the moment of birth.
– Till one year.
– Till three years.
– Till five years.
– Till seven years.

35. A doctor revealed hydrocele of the left testis at the patient. Where does a serous liquid accumulate at this disease?

+ Between the parietal and visceral lamina of vaginal tunic.
– Between external spermatic fascia and fascia of cremaster muscle.
– Between skin and tunica dartos.
– Between tunica dartos and external spermatic fascia.
– Between internal spermatic fascia and vaginal tunic.

36. At a newborn a testis was not found in the right half of the scrotum. What anomaly of development is it?

+ Monorchism.
– Epispadias.
– Hermaphroditism.
– Hydroceles.
– Hypospadia.

37. After trauma of testis the convoluted seminiferous tubules of parenchyma of testis are damaged. What function of testis is disturbed?

+ Spermatogenesis.

– Erection of penis.
– Excretion of sperm.
– Production of liquid part of seminal fluid.
– All the above - mentioned.

38. At the man after a wound of perineal region involuntary urination is present. Which of muscles is damaged?

+ M. sphincter urethrae.
– M. ischiocavernosus.
– M. bulbospongiosus.
– M. transversus perinei superficialis.
– M. transversus perinei profundus.

39. At the patient the phenomena of impotence was developed after trauma of perineal region. What muscle was damaged?

+ M. ischiocavernosus.
– M. levator ani.
– M. sphincter urethrae internus.
– M. sphincter urethrae externus.
– M. bulbospongiosus.

40. The ultrasonic examination of organs of lesser pelvis is carried out at a full urinary bladder. What perineal muscle retains the urine?

+ M. sphincter urethrae.
– M. bulbospongiosus.
– M. ischiocavernosus.
– M. transversus perinei superficialis.
– M. transversus perinei profundus.

41. An obstetrician usually makes the section of vaginal opening at base of labia majora during difficult exitof fetal head. What perineal muscle is here dissected?

+ M. bulbospongiosus.
– M. transversus perinei superficialis.
– M. ischiocavernosus.
– M. sphincter ani externus.
– M. transversus perinei profundus.

42. A patient has inflammation of bulbourethral glands. Between what perineal fasciae are these organs located?

+ Fasciae diaphragmatis urogenitalis superior et inferior.
– Fasciae diaphragmatis pelvis inferior et superior.
– Fasciae perinei superficialis et diaphragmatic urogenitalis inferior.
– Fasciae diaphragmatis urogenitalis superior et diaphragmatis pelvis inferior.
– Fasciae perinei superficialis et diaphragmatis pelvis inferior.

43. During removal of ovary a gynaecologist bandaged suspensory ovary ligament. What vessels were bandaged by a doctor in this ligament?

+ Ovarian artery and vein.
– Uterine artery and vein.
– Internal iliac vein.
– Tubular artery and vein.
– Internal iliac artery.

44. During the operation the ovary vessels were bandaged in the area of hilus of the ovary. Where was this manipulation carried out?

+ Margo mesovaricus.
– Facies lateralis.
– Margo liber.
– Facies medialis.
– Extremitas uterina.

45. At a woman the tumor of ovary was revealed. What ligament must a surgeon cut to separate the ovary from uterus?

+ Lig. ovarii proprium.
– Broad ligament of uterus.
– Lig. suspensorium ovarium.
– Lig. umbilicalis lateralis.
– Round ligament of uterus.

46. At a woman extra uterine pregnancy was found out. In what organ did the fertilization of the secondary oocyte and its development happen?

+ In a salpinx.
– Vagina.
– In an ovary.
– In the body of uterus.
– In the neck of uterus.

47. A woman was delivered to the obstetric department with a suspicion on extra uterine pregnancy. Where is blood accumulated at the rupture of salpinx?

+ In the rectouterine pouch.
– In the vesicouterine pouch.
– In the rectovesical pouch.
– In the right lateral canal.
– In the left lateral canal.

48. X– ray research of uterus with introduction of contrast medium is provided to a woman. What shape does shadow of uterine cavity have on a radiograph in a norm?

+ Triangle with concave sides.
– Form of Latin letter "V".
– Oval.
– Triangle with protuberant sides.
– Piriform (pear shaped).

49. On a radiograph with the contrast medium a uterus with two horns is seen. It is the reason of woman sterility. This congenital defect is a result of:

+ Disorder of paramesonephral ducts joint.
– The "cellular death" in the area of fundus uteri.
– Disorder of mesonephral ducts joint.
– Formation of septum in the area of fundus uteri.
– Disorder of recanalization process.

50. During the operation of removing uterus doctor bandaged a uterine artery. It is necessary to remember that ureter passes near uterine artery, where exactly?

+ Behind.
– Above.
– In front.
– Below.
– Laterally.

51. At vaginal examination of woman a gynecologist examines the external os of uterus. What anatomical structures does it form?

+ Anterior and posterior labia of neck of uterus.
– Body of uterus and anterior wall of vagina.
– Cervix uteri and anterior wall of vagina.
– Anterior and posterior walls of vagina.
– Cervix uteri and posterior wall of vagina.

52. During the examination a woman was diagnosed with endometritis. What part of uterine wall is involved into inflammatory process?

+ Mucous.
– Muscular.
– Adventitia.
– Serous.
– Parametrium.

53. The inflammatory process of fat around the cervix of uterus caused an intensive pain symptom. What was the pathological process of genitals established by a doctor?

+ Parametritis.
– Mesometritis.
– Myometritis.
– Endometritis.
– Perimetritis.

54. After complete removal of uterus the urination was stopped and the urinary bladder did not contain urine. What part of the urinary system was damaged?

+ Ureter.
– Kidney.
– Pelvis renalis.
– Urethra.
– Vesica urinaria.

55. During the gynecological examination of woman endometritis was diagnosed. What layer of uterine wall is involved into the inflammatory process?

+ Mucous.
– Muscular.
– Adventitia.
– Serous.
– Parametrium.

56. During insertion of intrauterine device cavity of the uterus was infected. What type of inflammation will develop at a woman most probably?

+ Endometritis.
– Perirectitis.
– Idiometritis.
– Parametritis.
– Metroperitonitis.

57. At vaginal examination of a woman a gynecologist examined the anterior fornix of vagina. What anatomic structures do it form?

+ Cervix of uterus and anterior wall of vagina.
– Anterior and posterior walls of vagina.
– Cervix of uterus and posterior wall of vagina.

– Anterior and posterior labia of neck of uterus.
– Body of uterus and anterior wall of vagina.

58. At the examination of pudendum a gynecologist revealed the inflammation of Bartholin's glands. Where does the pathological process take place?

+ Greater vestibular glands.
– Lesser vestibular glands.
– Vestibular bulb.
– Urethral glands.
– Lacunae urethrales.

59. A woman was admitted to the gynecological department with suspicion on the internal bleeding. What structure is used for puncture for the urgent diagnostic of bleeding?

+ Posterior fornix of vagina.
– Uterine orifice.
– Anterior fornix of vagina.
– Cervix uteri.
– Anterior wall of vagina.

60. At a woman with extra uterine pregnancy the puncture of posterior fornix of vagina is performed. What anatomic formation of peritoneum must be rea ched with a needle?

+ Rectouterine pouch.
– Left mesenteric sinus.
– Right mesenteric sinus.
– Right lateral canal.
– Vesicouterine pouch.

61. At a newborn the size of prepuce opening is narrowed and the glans penis can not go out through such opening. How is this called?

+ Fimosis.
– Hermaphroditism.
– Epispadias.
– Hypospadias.
– Parafimosis.

62. The presence of male and female genital glands at the masculine type of structure of external genital organs is established at the patient. What type of anomaly is it?

+ True hermaphroditism.
– Additional ovary.
– Male false hermaphroditism.
– Female false hermaphroditism.
– Ectopia of testes.

63. The woman has the massive swelling of left labia minora and a purulent excretion in a vestibule of vagina. What female genital gland become inflamed?

+ Greater vestibular gland (Bartholin's).
– Bulbourethral glands (Cowper's).
– Prostate.
– Lesser vestibular glands.
– Cervical.

64. After trauma of testes with hemorrhage into parenchyma the convoluted seminiferous tubules are damaged in the patient. What function of testes is damaged?

+ Production of spermatozoa.

– All above mentioned.
– Erection of penis.
– Conduction of sperm.
– Production of liquid part of sperm.

65. At the 10 years old girl the signs of premature pubescence are revealed. What function could the endocrine gland decrease to cause this phenomenon?

+ Epiphysis.
– Thyroid gland.
– Parathyroid glands.
– Thymus gland.
– Medulla of adrenal glands.

66. At the 13-years-old boy the signs of cretinism are revealed (nanism, excalation of genital organs and mental deficiensy). What caused development of this pathology?

+ Thyroid hypofunction.
– Thyroid hyperfunction.
– Hypofunction of parathyroid glands.
– Hyperfunction of parathyroid glands.
– Hypofunction of posterior lobe of hypophysis.

67. A man complains of the female sexual signs appeared in him. What gland tumor caused this pathological condition?

+ Glandula suprarenalis.
– Insulae pancreaticae.
– Glandula thyroidea.
– Glandula parathyroidea.
– Glandula pinealis.

68. At X-ray photograph of thorax of the 2 years old child the thymic shadow was revealed. Till what age is such phenomenon considered as a norm?

+ Till 3 years.
– Till 10 years.
– Till 5 years.
– Till 7 years.
– Till 17 years.

69. At a laboratory examination the increase of blood sugar level to 10 mmol/1 in the blood is revealed. What disease of endocrinegland is in the patient?

+ Pancreas.
– Sexual.
– Thyroid.
– Suprarenal.
– Epiphysis.

70. The 12-years-old boy has growth 180 cm and weight 68 kg. During the last 3 months he became taller at 15 cm. What endocrine gland hypersecretion is it?

+ Hypophysis.
– Epiphysis.
– Thyroid.
– Sexual.
– Suprarenal.

71. After the resection of thyroid gland the cramps appeared in a patient. What structure was injured during the operation?

+ Glandula parathyroidea.
– Nervus laryngeus inferior.
– Arteria laringea inferior.
– Nervus vagus.
– Truncus sympathicus.

72. At examination of a man the increase of hands, feet, mandible and hormonal disorders were revealed. At what gland hyperfunction are such symptoms revealed?

+ Anterior lobe of pituitary gland.
– Suprarenal.
– Pineal body.
– Thyroid.
– Sexual.

73. At X-ray photograph of bones of cranial base the destruction of different parts of the Turkish saddle is revealed. What endocrine gland tumor did it cause?

+ Hypophysis.
– Epiphysis.
– Thymus gland.
– Thyroid gland.
– Suprarenal gland.

74. The Bazedow's disease was revealed in the patient (the exophtalmia, skin dryness, frequent pulse, fingers shaking). What gland hyperfunction did it cause?

+ Thyroid.
– Inferior parathyroid.
– Suprarenal.
– Superior parathyroid.
– Hypophysis.

75. There is the insufficient hormone secretion of yellow body at the pregnant woman. What hormone is it?

+ Progesteron.
– Oestriol.
– Estradiol.
– Gonadotropin.
– Testosterone.

76. Myxedema was diagnosed in the patient (oedema of subcutaneous fat, apathy, fall of temperature). What gland function is disordered?

+ Thyroid.
– Thymus.
– Pancreas.
– Parathyroid.
– Suprarenal.

77. The shock requires a single administration of hormonal medicines which are secreted in the body of a men with cells of zona fasciculata of suprarenal cortex. What are these medicines?

+ Glucocorticoids.
– Mineralocorticoids.
– Prolactin.
– Testosterone.
– Parathormon.

78. The giantism was revealed in a young patient. What endocrine glands hypersecretion caused this pathological condition?

+ Hypophysis.
– Thyroid.
– Epiphysis.
– Thymus.
– Suprarenal.

79. A woman has weakness of labor (weakness of myometrium contraction). What hormone level is decreased?

+ Oxytocin.
– Corticosteroids.
– Parathormon.
– Thyroxin.
– Somatotropin.

80. The tumor is revealed at 1 year old child on the anterior wall of trachea above the jugular notch which descends to mediastinum. What organ press-es trachea?

+ Thymus gland.
– Parathyroid glands.
– Thyroid gland.
– Parathyroid lymph nodes.
– Paratracheal lymph nodes.

81. It is necessary to perform tracheotomy to a petient with disorder of respiration. At what level of tracheal rings located the isthmus of thyroid gland?

+ II–III.
– IV–V.
– III–IV.
– I–II.
– V–VI.

82. During the examination of the patient's nasal cavity the curvature of nasal septum was revealed. What parts does a nasal septum have?

+ Membranous, cartilaginous, bony.
– Cutaneus, cartilaginous, membranous.
– Cutaneus, cartilaginous, bony.
– Mucous, cutaneus, membranous.
– Membranous, mucous, bony.

83. The 5-years old boy has disorder of nasal breathing due to increase of pharyngeal tonsil. What openings of nasal cavity are closed in this case?

+ Choanae.
– Nostrils.
– Nasolacrimal duct.
– Pterygopalatine fossa.
– Hiatus.

84. The woman who worked in a chemical laboratory has an atrophy of mucous membrane at the olfactory region of nasal cavity. Where is it?

+ In the area of superior nasal meatus and corresponding part of nasal septum.
– In the area of nasopharyngeal meatus.
– In the area of middle nasal meatus and corresponding part of nasal septum.

– In the area of inferior nasal meatus and corresponding part of nasal septum.
– In the area of common nasal meatus.

85. A patient has inflammation of nasolacrimal duct. In what part of nasal cavity can infection get?

+ Inferior nasal meatus.
– Superior nasal meatus.
– Middle nasal meatus.
– Nasal vestibule.
– Ethmoid-sphenoidal corner.

86. The 1.5 month-old child has nasal breathing disorders. What anatomical features of nasal cavity structure of early age children prevent from the nasal breathing?

+ Nasal meatuses narrowing.
– Incomplete development of paranasal sinuses.
– Absence of inferior nasal meatus.
– Curvature of nasal meatuses.
– Incomplete development of choanae.

87. Ih a patient with acute respiratory viral infection left-sided highmoritis is diagnosed. What anatomical formation did the infection spread from?

+ Left middle nasal meatus.
– Common nasal meatus.
– Left superior nasal meatus.
– Left inferior nasal meatus.
– Cribriform plate of ethmoid bone.

88. A woman got a trauma of thyroid and cricoid cartilages of larynx. Moreover the swallowing was disordered. What muscles are suffered as a result of trauma?

+ Inferior constrictor of pharynx.
– Palatopharyngeal muscle.
– Middle constrictor of pharynx.
– Superior constrictor of pharynx.
– Stylopharyngeal muscle.

89. During the examination of laryngeal cavity a doctor revealed the nodal formations of vocal folds. Between which formations are vocal folds located?

+ Arytenoid and thyroid cartilages.
– Arytenoid cartilages.
– Thyroid cartilage and epiglottis.
– Arytenoid cartilages and epiglottis.
– Vocal and muscular processes of arytenoid cartilages.

90. The tumor in bounderies of posterior part of rima vocalis was revealed. During the examination between what cartilages of larynx is this compartment located?

+ Cartilago arytenoidea.
– Cartilago thyroidea.
– Cartilago cricoidea.
– Cartilago corniculata.
– Cartilago cuneiformis.

91. At the radiograph the presence of foreign body in the area of tracheal bifurcation was revealed. At what level is the foreign body located?

+ Th4 – Th5.

– C7 – Thl.
– Thl – Th2.
– C6 – C7.
– Th6 – Th8.

92. A child has tumor on the anterior wall of the trachea in the region of jugular notch of sternum spreading to the anterior mediastinum. What organ can trachea compress?

+ Thymus gland.
– Thyroid gland.
– Parathyroid glands.
– Parathyroid lymph nodes.
– Paratracheal lymph nodes.

93. The patient was delivered to the hospital after swallowed ground-nut with symptoms of breathing disorders. Where can this foreign body be located most probably?

+ Right main bronchus.
– Left main bronchus.
– Trachea.
– Vestibular folds.
– Vocal folds.

94. A doctor inserted the bronchoscope into one of the lobar bronchus what divided it into two segmental bronchi. In which lobe of the lung did a doctor provide manipulation?

+ In the middle lobe of the right lung.
– In the superior lobe of the right lung.
– In the lower lobe of the right lung.
– In the superior lobe of the left lung.
– In the inferior lobe of the left lung.

95. On the radiograph the foreign body was revealed at the level of the 6-th thoracic vertebra on the middle line. Where is this foreign body located?

+ In the esophagus.
– In the pharynx.
– In the trachea.
– In the left main bronchus.
– In the right main bronchus.

96. The pneumonectomy includes cutting a root of the lung. In what order are structures in a root of the left lung from up to down located?

+ Pulmonary artery, main bronchus, pulmonary veins.
– Pulmonary artery, pulmonary veins, main bronchus.
– Main bronchus, pulmonary artery, pulmonary veins.
– Main bronchus, pulmonary veins, pulmonary artery.
– Pulmonary veins, main bronchus, pulmonary artery.

97. Lobectomy of superior lobe of the right lung was performed. What segments were removed?

+ Apical, posterior, anterior.
– Lateral, middle, superior.
– Middle, basal and lateral basal.
– Posterior basal, superior and inferior lingular.
– Posteroapical.

98. Lobectomy of superior lobe of the right lung was performed. How many segments were removed?

+ 3.
– 4.
– 5.
– 2.
– 0.

99. A patient has tumor of the middle lobe of the right lung. How many segments can be removed during the operation?

+ 2.
– 3.
– 4.
– 5.
– l.

100. The additional respiratory sound was auscultated at the left side of the back on the level of the VII–X ribs in the patient. In what segment of the lung is the pathological process located?

+ Posterior basal.
– Inferior uvular.
– Medial basal.
– Lateral basal.
– Anterior basal.

101. Lobectomy of the middle lobe of the right lung was performed to the 3 years-old child. What segments were removed?

+ Lateral and medial.
– Medial and anterior.
– Apical, posterior, anterior.
– Posterior and lateral basal.
– Posteroapical.

102. The patient has nidus of tuberculosis in the superior lobe of the left lung. What greatest quantity of segments can be removed from the superior lobe of the left lung?

+ 5.
– 6.
– 3.
– 2.
– l.

103. During the operation on lungs a surgeon removed blood clot from the horizontal fissure. What lobes of the lung are separated with this fissure?

+ Superior and middle lobes of the right lung.
– Inferior and middle lobes of the right lung.
– Superior and inferior lobes of the right lung.
– Superior and inferior lobes of the left lung.
– Inferior lobes of the right and left lungs.

104. The lower margin of the right lung on the midclavicular line raised to the level of the III rib was revealed at the patient. Where must it be in a normal condition?

+ VI rib.
– Vrib.
– VII rib.
– VIII rib.
– IX rib.

105. A doctor made a conclusion tht there was a destruction of the alveolar tree in the left lower segment. What anatomical structure doesn't belong to the alveolar tree?

+ Intrasegmental bronchi.
– Alveolar saccules.
– Alveolar ducts.
– Alveolae.
– Respiratory bronchioles.

106. The "vesicular breathing" is a normal sound which appears in the broncial tree. What anatomical structures do not concern elements of a bronchial tree?

+ Respiratory bronchioles.
– Terminal bronchioles.
– Lobular bronchi.
– Lobar bronchi.
– Segmental bronchi.

107. In the sick child sicr with RDS (respiratory distress syndrome) connected with disturbances of surfactant production was revealed. The surfactant covers:

+ Alveolar walls.
– Walls of larynx.
– Walls of trachea.
– Bronchi.
– Bronchioles.

108. A patient has exudation in the pleural cavity. To prevent injuring intercostal arteries the puncture of pleural cavity should be performed:

+ In the upper edge of the subjacent rib.
– In the place of transition of the bone part of the rib into cartilaginous bone.
– On the lower edge of overlying rib.
– In the middle point between the ribs.
– At the head of the rib.

109. The patient has tumor of the lower third of esophagus. What serous layer of thoracic cavity can be damaged during the operation in this area?

+ Right mediastinal pleura.
– Diaphragmatic pleura.
– Left mediastinal pleura.
– Right costal pleura.
– Left costal pleura.

110. A patient has the left-sided exudative pleuritis (pleurisy). In what anatomical formation of pleura will the inflammatory exudates be collected?

+ Costodiaphragmatic sinus.
– Costomediastinal sinus.
– Phrenicomediastinal sinus.
– All the above mentioned.
– Cupula of the pleura.

CARDIOVASCULAR SYSTEM

111. The patient had sinual tachycardia" (150 beats/min). It is known that this pathology occurs at increased stimulation of action of the sinoatrial node. Where is it located?

+ In the wall of the right atrium.
– In the interventricular septum.
– In the left atrium.
– In the left ventricle.
– In the right ventricle.

112. The patient has the heart rate 55 beats/min, ECG indicates the sinus rhythm. What part of the cardiac conduction system was affected in this case?

+ Sinoatrial node.
– Atrioventricular node.
– Right leg of the His bundle.
– Left leg of the His bundle.
– Sinoatrial bundle.

113. In the patient the disease of the mitral valve is developed as a result of rheumatism. Where will the pathological sound (heart murmur) be heard during the auscultation?

+ On the apex of the heart.
– In the 2nd intercostal space to the left from breastbone.
– In the 2nd intercostal space to the right from the breastbone.
– In the area of the xiphoid process of the breastbone.
– In the 3rd intercostal space to the right from breastbone.

114. In the patient His bundle blockade was revealed. Where is it located?

+ In the interventricular septum.
– In the cusps of the mitral valve.
– In the interatrial septum.
– In the cusps of the tricuspid valve.
– On the apex of the heart.

115. In the patient insufficiency of mitral valve was revealed. Where is this valve located?

+ Between the left atrium and left ventricle.
– Between the right atrium and right ventricle.
– Between the left and right atriums.
– Between the left and right ventricle.
– In the place of output of the aorta.

116. At the examination of the child it was revealed that the heart oval opening of the heart is not obliterated. Where is this opening located?

+ Between the left and right atriums.
– Between the right atrium and right ventricle.
– Between the left atrium and left ventricle.
– Between the left and right ventricles.
– In the area of mitral valve.

117. The enlargement of shadow of heart contour in its lower compartment was revealed in X-ray photograph. What compartment of the heart is enlarged?

+ Left ventricle.
– Auricle of the left atrium.
– Right ventricle.
– Left atrium.
– Right atrium.

118. In the patient the heart attack of myocardium of the anterior wall if the left ventricle is diagnosed. What artery of the heart is injured?

+ Anterior interventricular branch of the left coronary artery.
– Right coronary artery.
– Posterior interventricular branch of the right coronary artery.
– Circumflex branch of the left coronary artery.
– Musculophrenic artery.

119. At the patient the devascularization of the posterior part of interventricular septum was diagnosed. What artery was injured?

+ Posterior interventricular.
– Left coronary artery.
– Anterior interventricular artery.
– Circumflex artery
– Right coronary artery.

120. A doctor revealed worsening of venous blood flov in the vein passing in the anterior interventricular groove of the heart. What is this vein?

+ V. cordis magna.
– V. cordis media.
– V. cordis parva.
– V. posterior ventriculi sinistri.
– V. obliqua atrii sinistri.

121. At the patient heart attack of the right ventricle posterior wall was diagnosed. What artery supplies this area of the heart?

+ Right coronary artery.
– Left coronary artery.
– Circumflex.
– Anterior interventricular.
– Pulmonary artery.

122. A forensic doctor revealed the injuri of coronary sinus during the examination of the heart. Define the place of inflow of the injured anatomic formation.

+ Right atrium.
– Superior vena cava.
– Inferior vena cava.
– Right ventricle.
– Left atrium.

123. At a patient with pericarditis the accumulation of serous fluid in the sinuses of pericardium is revealed. What are sinuses are in a norm?

+ Sinus transversus pericardii et sinus obliquus pericardii.
– Sinus transversus et sinus verticalis.
– Sinus dexter et sinus sinister pericardii.
– Sinus transversus pericardii et sinus rectus.
– Sinus obliquus pericardii et sinus superior.

124. What artery hemorrhage can the paralysis of cardiovascular and respiratory center cause?

+ Arteria cerebri posterior.
– Arteria cerebri anterior.
– Arteria cerebri media.
– Arteria communicans anterior.
– Arteria communicans posterior.

125. At a patient with cancer of the tongue was the strong bleeding because of destruction of dorsal artery. What vessel must a doctor bandage to stop bleeding?

+ Lingual artery.
– Arteria profunda linguae.
– Arteria dorsalis linguae.
– Facial artery.
– A. pharyngea ascendens.

126. A dentist diagnosed the sphenoiditis in the patient. All possible was done to prevent the process of involvement of artery which lies in the cavernous sinus. What is this artery?

+ A. carotis interna.
– A. carotis externa.
– A. ophthalmica.
– A. supraorbitalis.
– A. infraorbitalis.

127. Removing tumour near the ala of the nose a surgeon injured a vessel that resulted to formation of subcutaneous haematoma. What vessel is injured?

+ A. facialis.
– A. maxillaris.
– A. supraorbitalis.
– A. infraraorbitalis.
– A. angularis.

128. A doctor revealed that patient had the injury of squama of temporal bone and subdural haematoma. What injury of the artery resulted to formation of haematoma?

+ A. meningea media.
– A. maxillaris.
– A. carotis interna.
– A. ophthalmica.
– A. sphenopalatina.

129. During the operation of mastoid process of the temporal bone a doctor ca n injury facial nerve canal. What artery passes together with the facial nerve in the canal?

+ A. stylomastoidea.
– A. facialis.
– A. maxillaris.
– A. meningea media.
– A. occipitalis.

130. During the examination the subcutaneous haematoma of temporal area was revealed in the patient. What vessel injury resulted to formation of haematoma?

+ A. temporalis superficialis.
– A. maxillaris.
– A. auricularis posterior.
– A. buccalis.
– A. occipitalis.

131. In woman after anaesthesia the subcutaneous haematoma appeared under the eye. What artery was injured during anaesthesia?

+ Maxillary artery.
– Lingual artery.
– Facial artery.
– Superficial temporal artery.
– Ascending esophageal artery.

132. The patient has vision impairment related to pathology of arterial vessels of the eyeball. Which of the enumerated arteries is the main source of the blood supply of the retina?

+ A. centralis retinae.
– Aa. ciliares posteriores longi.
– Aa. conjunctivales.
– Aa. ciliares posteriores breves.
– Aa. episclerales.

133. The patient complains of inflammation of parotid salivary gland. By what artery branches is it supplied with blood in a norm?

+ A. temporalis superficialis.
– A. facialis.
– A. auricularis posterior.
– A. pharyngea ascendens.
– A. meningea media.

134. The patient has inflammation of cells of ethmoid bone (ethmoiditis). What artery branches supply the ethmoidal cells with blood?

+ A. ophthalmica.
– A. cerebri anterior.
– A. infraorbitalis.
– A. facialis.
– A. transversa faciei.

135. In a patient the extension in width of a. communicans posterior of the arterial circle of the brain is revealed. What vessels of this circle does it connect?

+ A. carotis interna et a. cerebri posterior.
– A. cerebri media et a. cerebri posterior.
– A. carotis interna et a. cerebri media.
– A. caroti s externa et a. cerebri anterior.
– A. cerebri anterior et a. cerebri media.

136. In a patient at the examination of function of the organ equilib– rium devascularizations of the structures of internal ear are revealed. What artery branch does a labyrinthi belony to?

+ A. basilaris.
– A. temporalis superficialis.
– A. cerebri media.
– A. cerebri anterior.
– A. cerebri posterior.

137. After extraction of the second molar of the maxilla begins bleeding from the corresponding alveola. From what artery system did bleeding begin?

+ Maxillary.
– Facial.
– Ascending esophageal.
– Inferior alveolar.
– Mandibular and sublingual.

138. A surgeon-dentist revealed the stone in the submandibular gland in the patient. Removing it he prevented bleeding from the artery:

+ A. facialis.
– A. submentalis.
– A. alveolaris inferior.

– A. labialis inferior.
– A. lingualis.

139. The patient had hemorrhagic stroke in the area of medial surface of frontal lobe of the right cerebral hemisphere. What artery was injured?

+ A. cerebri anterior.
– A. cerebri posterior.
– A. communicans anterior.
– A. cerebri media.
– A. communicans posterior.

140. A surgeon-dentist is going to make the operation at lower jaw. He must remember that the lower alveolar artery originates from:

+ Mandibular compartment of the maxillary artery.
– Pterygopalatine compartment of the maxillary artery.
– Infratemporal compartment of the maxillary artery.
– Facial artery.
– Lingual artery.

141. During MRI investigation a local expansion (aneurysm) of arterial vessel passing in the lateral cerebral sulcus was revealed. What vessel is changed pathologically?

+ A. cerebri media.
– A. communicans posterior.
– A. cerebri anterior.
– A. cerebri posterior.
– A. communicans anterior.

142. A patient has devascularization of the medial surface of the right cerebral hemisphere. What artery is injured?

+ A. cerebri anterior.
– A. chorioidea.
– A. communicans posterior.
– A. cerebri posterior.
– A. cerebri media.

143. The patient was delivered to the emergency station with bleeding from the lacerated wound in the corner of the mouth. What artery is injured?

+ Facial.
– Maxillary.
– Lingual.
– Anterior superior alveolar.
– Infraorbital.

144. The patient has functional violations due to cerebral apoplexy. What artery injury is a result of such pathology?

+ Basilar artery.
– Median cerebral arteries.
– Anterior cerebral artery.
– Internal carotid artery.
– Posterior cerebral artery.

145. What anatomic landmark serves for establishment of the place of external carotid artery origin on the neck?

+ Superior edge of the thyroid cartilage.
– Jugular notch.

– Angle of the lower jaw.
– Inferior edge of the thyroid cartilage.
– Place of the sternocleidomastoid muscle origin.

146. During the operation the surgeon must separate superior and inferior thyroid arteries which form arterial anastomoses in the gland. What large vessels branches are these arteries belony to?

+ A. carotis externa et a. subclavia.
– A. carotis interna et a. subclavia.
– A. carotis externa et a. carotis interna.
– A. subclavia et truncus thyrocervica– lis.
– A. subclavia et a. transversa colli.

147. The operation of the right lobe of thyroid yland must be carried out in 25 years old patient. What arteries supply the thyroid gland with blood?

+ Superior thyroid, inferior thyroid.
– A. inferior thyroid, occipital, superficial temporal arteries.
– Superior thyroid, inferior thyroid, lingual, facial arteries.
– Inferior thyroid, lingual, facial arteries.
– Superior thyroid, lingual, superficial temporal arteries.

148. During the operation of the middle mediastinum a surgeon must separate a. pericardiacophrenica. What arterial vessel branch does it belony to?

+ A. thoracica interna.
– A. truncus thyrocervicalis.
– A. vertebralis.
– A. transversa colli.
– Truncus costocervicalis.

149. During the examination of the patient with acute pancreatitis the devascularization of the pancreas was revealed. By what large arterial branches vessels is it supplied?

+ Truncus coeliacus and a. mesenterica superior.
– A. lienalis and a. mesenterica inferior.
– Truncus coeliacus and a. mesenterica inferior.
– A. mesenterica superior and inferior.
– A. lienalis and a. mesenterica superior.

150. The resection of the ascending colon is appointed for the patient. Specify the major source of the blood supply of the right half of the colon.

+ A. right colic artery.
– Inferior mesenteric artery.
– Right internal iliac artery.
– Left internal iliac artery.
– Middle colic artery.

151. The operation of the descending colon is appointed for the patient with cancer. Specify the major source of its blood supply.

+ Inferior mesenteric artery.
– Superior mesenteric artery.
– Truncus coeliacus.
– Middle colic artery.
– Splenic artery.

152. After a motor– car accident the victim's spleen is injured as result a plenty of hemorrhages are revealed. What artery supplies the spleen?

+ Coeliac trunk.
– Superior mesenteric artery.
– Aorta.
– Hepatic artery.
– Inferior mesenteric artery.

153. The operation of the stomach was carried out. Specify arteries which provide blood supply of the lesser curvature of stomach?

+ Left and right gastric arteries.
– Short gastric arteries.
– Left gastroomental artery.
– Right gastroomental artery.
– Gastroduodenal artery.

CENTRAL NERVE SYSTEM

A patient has meningitis. A lumbar punctureof the subarachnoid space is prescribed. Between what formations is it located?

+arachnoid and pia mater
–periosteum and arachnoid
–dura mater and arachnoid
–periosteum and dura mater
–dura mater and pia mater

A patient has epidural abscess (epiduritis) –an accumulation of pus in the epidural space of the spinal cord. Define the localization ofthe pathological process.

+between periosteum and dura mater
–between arachnoid and pia mater
–between dura mater and arachnoid
–between pia mater and spinal cord
–between dura mater and pia mater

A patient has a damage of the 5th thoracic vertebra as a result of an accident. Which segment of the spinal cord can be damaged?

+7th thoracic segment
–3rd thoracic segment
–5th thoracic segment
–4th thoracic segment
–6th thoracic segment

It is necessary to carry out a lumbar puncture to confirm the diagnosis of meningitis. The inferior border of which lumbar vertebrae is a safe place for the manipulation?

+L 3
–L 4
–L 2
–L 5
–L l

The hemorrhage in anterior horns of the spinal cord is diagnosed in the 65–year–old patient. What are the anterior horns according to function?

+motor
–parasympathetic
–sensory
–sympathetic
–mix

Many leucocytes in the liquid received from the space between the arachnoid and pia maters of the spinal cord is determined. What formation was punctured?

+spatium subarachnoidale
–cavum trigeminale

–spatium subdurale
–spatim epidurale
–cisterna cerebellomedullaris posterior
A patient has coordination impairment and loss of balance. What structures of the central nervous system are affected?
+cerebellum and its conducting tracts
–the area of the precentral gyrus
–motor nuclei of the spinal cord
–anterior funiculi of the spinal cord
–red nucleus of mesencephalon
A patient has trauma in an occipital region of the skull. Gait and balance disoders were detected during examination. What part of the brain is damaged?
+cerebellum
–spinal cord
–medulla oblongata
–pons
–diencephalon
The absence of the pupillary reflex due to anesthesia was diagnosed in patient during surgery. What brainstem structure is affected?
+mesencephalon
–cerebellum
–diencephalon
–medulla oblongata
–metencephalon
A patient has dysfunction of the brain cortex. It is caused by neurological disorders in a brain stem supporting cortex activity. What is the structure of the brain stroke?
+reticular formation
–basal ganglia
–nuclei of cerebellum
–caudate nucleus
–nuclei of hypothalamus
The red nucleus syndrome can be found as a result of the posterior cerebral artery damages. What part of the brain is damaged from the stroke?

+mesencephalon
–thalamus
–metayhalamus
–epithalamus
–hypothalamus
A patient has double vision (diplopia), paralysis of accommodation, ptosis, and mydriasis (dilatated pupil). What mesencephalon nuclei are affected?
+nuclei of oculomotor and trochlear nerve
–nuclei of inferior colliculus
–nuclei of superior colliculus
–red nucleus
–substantia nigra
A 60-year–old patient has a prolonged sleep after a hemorrhage in the brain. What structure has being damaged most probably?
+reticular formation
–hippocampus
–cranial nerves' nuclei
–substantia nigra
–cortex of brain hemispheres
A changein the form of the Turkish saddle has been revealed in the patient. Doctors

have suspected a pituitary gland tumour. What part of the brain does the pituitary gland relate to?
+diencephalon
–mesencephalon
–telencephalon
–rhombencephalon
–metencephalon
A patient with diencephalic damage has a hearing disorder. What nuclei are damaged?
+medial geniculate body
–lateral geniculate body
–red nucleus
–anterior nuclei of the hypothalamus
–posterior ventral nucleus
The patient has a strong feeling of hunger. Disfunction of receptors that maintain carbohydrate level in blood are revealed in subthalamic region. What part of the brain is damaged from stroke?
+diencephalon
–medulla oblongata
–mesencephalon
–pons
–medulla oblongata
A patient has exophthalmos, caused by excessive secretion of thyrotropic hormone by a pituitary gland. What part of the diencephalon does the pituitary body belong to?
+hypothalamus
–thalamus
–mesencephalon
–metethalamus
–epithalamus
Pathological changes have been revealed in the telencephalon of the patient with Parkinson's disease. What has changed in particular?
+lentiform nucleus
–angular gyrus
–supramarginal gyrus
–uncus of the hypocampal gyrus
–amygdaloid body
A metal nail has pierced the squamous part of the temporal bone and has penetrated into the substance of the left temporal lobe closer to the temporal pole. Which of the basal nuclei is damaged?
+amygdaloid body
–lentiform nucleus
–caudate nucleus
–claustrum
–pallidum
Chorea is diagnosed in a patient. Chorea is characterized by jerky uncontrolled movements. What brain structures are involved?
+substantia nigra and corpus striatum
–pulvinar thalamicus
–fasciculus longitudinalis medialis
–fasciculus longitudinalis posterior
–nucleus ruber
The damage to the striopallidar system has resulted in the development of athetosis (rhythmic involuntary movements of extremities). What nucleus is damaged?
+corpus striatum
–anterior nucleus of the hypothalamus

–medial geniculate body
–lateral geniculate body
–posterior nucleus of the hypothalamus

A patient has a hemorrhage in the right hemisphere. Thus associative fibers bridging the cortex of the frontal pole with the temporal pole have suffered. What fascicle it?

+uncinate fascicle
–inferior longitudinal fascicle
–superior longitudinal fascicle
–arcuate fibers
–cingulum

A patient has tumor of the right hemisphere, which has squeezed associative fibers of the white matter, connecting the cortex of the temporal and occipital lobes. Name these fibers.

+inferior longitudinal fascicle
–superior longitudinal fascicle
–uncinate fascicle
–arcuate fibers
–cingulum

The corpus callosum was cut out in the surgical treatment of epilepsy. What fibers were cut out?

+commissural
–projection
–associative
–pyramidal
–extrapyramidal

The loss of sight was observed after a head trauma in the occipital regione. What was found during examination?

+pathologic process is located in cortical end of the visual analyzer (area of calcarine sulcus)
–pathologic process is located in the parietal lobe of a brain
–pathologic process is located in the medial geniculate body
–pathologic process is located in the cerebellum
–pathologic process is located in the medulla oblongata

A patient has lost the ability to write letters after problems with cerebral blood supply. The damage of which lobe of the brain can result in such pathology?

+frontal lobe
–insula
–parietal lobe
–occipital lobe
–temporal lobe

A patient has unilateral paralysis of the left inferior extremity. What area of the cerebral cortex is the center of the lesion?

+the right precentral gyrus
–the superior parietal lobule
–the postcentral gyrus
–the left precentral gyrus
–the middle temporal gyrus

A patient has disoder of superficial and deep sensitivity on circumscribed sites of the body. What gyrus defeat was diagnosed by the doctor?

+postcentral gyrus
–precentral gyrus
–superior temporal gyrus
–middle temporal gyrus
–gyrus fornicatus

A patient has a hemorrhage in the postcentral gyrus. In what kind of sensory processing disoder at the opposite side of the body will it result?

+skin and proprioceptive

–olfactory and gustatory
–auditory and visual
–auditory
–visual

A patient has lost an ability to pronounce words distinctly after an injury of the brain. What area of the cerebral cortex has been affected?

+frontal lobe
–occipital lobe
–parietal lobe
–temporal lobe
–insula

A patient has an acute hearing impairment. There is no pathology in sound conducting and perceiving structures. What gyrus of the cerebral cortex has been affected by pathological changes?

+superior temporal
–middle temporal
–superior frontal
–supramarginai
–angular

A patient has muscle paralysis of the left upper and lower extremities. What gyrus of the cerebral cortex has suffered a stroke?

+precentral
–postcentra.
–middle frontal
–inferior frontal
superior frontal

A patient does not understand the sense of words and his native language (verbal deafness). What gyrus of the cerebral cortex has suffered a stroke?

+superior temporal
–postcentral
–inferior frontal
–superior parietal lobule
–inferior parietal lobule

A patient complains of impossibility to recognize objects through touch. Which cortical area has to be damaged to cause astereognosis?

+in the cortex superior parietal lobule
–in the cortex of middle frontal gyrus
–in the cortex of the superior temporal gyrus
–in the cortex of occipital lobe
–in the cortex of inferior parietal lobule

A patient has signs of sensory aphasia, that is the patient hears sounds but has lost ability to understand words. Which cortical areas have to be damaged?

+in the temporal lobe
–in the frontal lobe
–in the occipital lobe
–in the parietal lobe
–in the insula

A patient is experiencing a true taste loss. The clinical examination has established cortical localization of the pathological process. Where is it located?

+in the uncus and hippocampus
–in the uncus and the inferior part of the precentral gyrus
–in the angular gyrus and the hippocampal gyrus
–in the inferior frontal gyrus and the subcallosal area
–in the subcallosal area and the cingulate gyrus

A hemorrhage in the cortical area between calcarine and parietooccipital sulci was found in the patient. What is that cortical area called?
+cuneus
–uncus
–precuneus
–cingulum
–paracentral lobule
A patient has ceased recognizing the relatives after a serious closed craniocerebral trauma. What cortical center is damaged?
+cortex above the calcarine sulcus
–cortex of the supramarginal gyrus
–cortex of the superior temporal gyrus
–cortex of the precentral gyrus
–cortex of the postcentral gyrus
A patient has complained of the loss of the abiliity to write words. The diagnosis of a written aphasia was put by a doctor. What cortical analyzer is damaged?
+cortical center of the motor analyzer of written speech
–cortical center of the sensitive analyzer
–cortical center of the motor analyzer of spoken speech
–cortical center of the motor analyzer
–cortical center of the visual analyzer
A patient has lost the ability to carry out complex coordinated movements (apraxia) after traumatic event. Where is the corresponding cortical center located?
+ in the supramarginalis gyru
–in the parahipocampalis gyrus
– in the angularis gyrus
– in the paracentralis gyrus
– in the lingualis gyrus
A patient has lost the ability to coordinated turning of the head and eyes in the opposite direction after traumatic brain injury. Where is the corresponding cortical center located?
+posterior part of the middle frontal gyrus
–frontal pole
–posterior part of the superior frontal gyrus
–angular gyrus
–inferior parietal lobule
A patient has lost the ability to carry out complex combined movements (apraxia) after traumatic brain injury. Where is the corresponding cortical center located?
+inferior parietal lobule
–posterior part of the superior frontal gyrus
–frontal pole
–paracentral lobule
–posterior part of the middle frontal gyrus
A patient has motor neuron disorder which affects facial muscles. Where is the corresponding cortical center located?
+inferior part of the precentral gyrus
–superior part of the precentral gyrus
–supramarginal gyrus
–superior parietal lobule
–angular gyrus
A patient has a motor aphasia. What part of the brain is damaged?
+inferior frontal gyrus
–superior temporal gyrus
–hypoglossal nerve
–middle frontal gyrus

–angular gyrus
Visual perception is broken in the person after traumatic brain injury. What area of the cerebral cortex has been damaged?
+occipital area of the cortex
–postcentral gyrus
–parietal area of the cortex
–temporal area of the cortex
–precentral gyrus
Sound perception is broken in the person after traumatic brain injury. What area of the cerebral cortex has been damaged?
+temporal lobe of the cortex
–parietal lobe of the cortex
–occipital a lobe of the cortex
–precentral gyrus
–postcentral gyrus
The brain injury has resulted in motor speech disoder. What area of the cerebral cortex has been damaged?
+inferior frontal gyrus
–superior temporal gyrus
–middle temporal gyrus
–supramarginal gyrus
–precentral gyrus
A patient has disoders of pain and temperature sensation after a spinal cord injury. Fibers of what conducting tract were destroyed?
+lateral spinothalamic tract
–aterior spinocerebellar tract
–lateral spinocortical tract
–medial spinocortical tract
–posterior spinocerebellar tract
Pain and temperature sensations on the left half of the trunk are absent after injury. Damage to which conducting tract can cause this phenomenon?
+tractus spinothalamicus lateralis on the right
– tractus spinothalamicus anterior on the right
– tractus spinothalamicus lateralis on the left
– tractus spinothalamicus anterior on the left
–fascicles of Goll and Burdach on the left
Damage to the posterior funiculus of the spinal cord at the level of the 1st thoracic vertebrae has deen revealed in the victim. What conducting tracts have suffered?
+tactile and proprioceptive sensitivity
–pain and temperature sensitivity
–corticospinal
–spinocerebellar
–extrapyramidal
The posterior funiculi of the spinal white matter have been damaged as a result of the knife wound. What neurologic disoders can be observed in this case?
+disoders of proprioceptive, tactile sensitivity, and stereognosis
–disoders of pain sensitivity and thermoesthesia
–disoders of touch and pressure sensitivity
–disoders of conscious and voluntary movements
–disoders of unconscious and involuntary movements
Following an injury of spinal cord, the victim lost tactile sensitivity, sense of body position and vibration sense. What conducting tracts have been damaged?
+Goll's and Burdach's fascicles
–Flechsig's and Gowers' tracts

–rubrospinal tract
–reticulospinal tract
–tectospinal tract

The pyramids of the medulla oblongata are damaged in the patient with tumour. What conducting tracts carrying out nerve impulses are damaged?

+tractus corticospinalis
–tractus corticopontinus
–tractus corticonuclearis
–tractus dentatorubralis
–tractus spinocerebellaris

In a patient with local defeat of the brainstem, the conducting tracts of crus cerebri are damaged. What conducting tract is forming the ventral tegmental decussation?

+ tractus rubrospinalis
– tractus tectospinalis
– tractus corticospinalis anterior
– tractus corticospinalis lateralis
– tractus corticonuclearis

Appreciably expanded the lateral and the third ventricles were revealed at the patient. The doctor diagnosed a blockage of cerebrospinal fluid pathways. Define an area of the occlusion:

+cerebral aqueduct
–interventricular foramen
–median aperture of the fourth ventricle
–lateral aperture of the fourth ventricle
–arachnoidal [pacchionian] granulations

A patient complains of a pain in the lumbar region. The doctor diagnosed the lumbar radiculitis. Where was a compression of spinal roots most likely?

+in the intervertebral foramens of the lumbar vertebral column
–in the vertebral canal
–in the nutrition foramens of the lumbar vertebrae
–in the foramena of transverse processes of the cervical vertebrae
–in the matter of lumbar segments of the spinal cord

A patient has ceased to feel pain from a prick during injections after a hemorrhage. What structures of the nervous system may be damaged?

+nucleus of the thalamus
–medial geniculate bodies
–lateral geniculate bodies
–red nucleus
–basal nuclei of the cerebral hemispheres

Between what vertebrae is the lumbar puncture made in adults?

+L3–L4
–L1–L2
–L2–L3
–L4–L5
–L5–S1

A patient after trauma to the spinal cord, has lost deep sensitivity and movements in the right lower limb. What part of the spinal cord is injured?

+the right half of the spinal cord
–the anterior part of the spinal cord
–the posterior part of the spinal cord
–the left half of the spinal cord
–a complete transversal break of the spinal cord

An injury of the posterior funiculi of the spinal cord at the level of the first–order thoracic vertebra is revealed in the victim. What conducting tracts are damaged?

+tactile and proprioceptive sensitivity

–pain and thermoesthesia
–corticospinal
–spinoserebellar
–extrapyramidal

A patient, after a head injury, hears and understands speech, but cannot correctly name an object. What gyrus is damaged?

+inferior frontal gyrus
–superior frontal gyrus
–anterior frontal gyrus
–middle frontal gyrus
–middle temporal gyrus

A patient, working as a mechanic, has suddenly lost the ability to carry instruments during hes work. In what lobe of the brain is a center of injury located?

+in the supramarginal gyrus
–in the angular gyrus
–in the superior temporal gyrus
–in the superior parietal lobule
–in the occipital lobe

A patient has suddenly lost the ability to read a text. He sees letters, but not able to make words of them. In what lobe of the brain is the injury located?

+in the anglular gyrus
–in the middle temporal gyrus
–in the supramarginal gyrus
–in the superior parietal lobule
–in the occipital lobe

The loss of tactile sensitivity is revealed during medical examination of the patient with damage to cerebral hemispheres. What region of the cerebral cortex has been damaged?

+postcentral gyrus
–frontal lobe
–occipital lobe
–parietal lobe
–precentral gyrus

Cerebellar ataxy (the loss of body equilibrium) is observed in a patient after poisoning by an unknown pesticid. What cerebellum nucleus is damaged in this case?

+nucleus fastigii
–nucleus emboliformis
–nucleus dentatus
–nucleus globosus
–all nuclei

Involuntary movements and muscle tone derangement in the trunk were developed in the patient after the brain disease. What conductive tract is damaged?

+tractus rubrospinalis
–tractus corticospinalis
–tractus corticonuclearis
–tractus olivospinalis
–tractus tectospinalis

A patient cannot read and understand written words (alexia), but visual function is not broken. What analyzer nucleus has been injured?

+nucleus of the visual analyzer of written speech
–nucleus of the motor analyzer of written speech
–nucleus of the acoustic analyzer of oral speech
–nucleus of the visual analyzer
–nucleus of the motor analyzer of oral speech

A patient has complete demyelination of ascending conductive tracts. What kind of sensitivity will persist under these conditions?
+vision
–thermoesthesia
–vibratory sensitivity
–sensation of pressure
–proprioception
The expansion of the third brain ventricle is marked in the patient. What structure takes part in formation of its anterior wall?
+lamina terminalis
–septum pellucidum
–corpus fornicis
–pedunculi fornicis
–stria medullaris
After having meningoencephalitis a patient suffers from a spinal fluid accumulation in ventricles of the brain. What could cause this phenomenon?
+obturation of apertures in the 4th ventricle
–obturation of interventricular foramen on the left side
–obturation of the interventricular foramen on the right side
–obturation of the cerebral aquiduct
–obturation of the central canal of the spinal cord
Voluntary movements of the head and neck muscles and the hematoma at the genu of the internal capsule are observed in the patient. What conducting tract is injured?
+tractus corticonuclearis
– tractus cprticofrontopontinus
– tractus corticospinalis
– tractus corticothalamicus
– tractus thalamocorticalis
A test of a pupillary reflex in the patient has demonstrated retardation of of the left eye reaction to the light. The function of what vegetative nucleus is implied?
+parasympathetic nucleus of CNIII (Yakubovich nucleus)
–nucleus of the trochlear nerve
–red nucleus
–nucleus of the superior colliculi of the lamina qudrigemina
–nucleus of inferior colliculi of the lamina quadrigemina
In the patient, the pathological defect of the right and left lateral ventricles has formed. What anatomic structure of the brain was damaged?
+septum pellucidum
–a falx cerebri
–anterior cerebral comissure
–posterior cerebral comissure
–a corpus callosum
A student has asked the anatomy teacher the name of the part of the lobe that is posed between the cingulate sulcus and the parietooccipital sulcus of the hemisphere. What is it called?
+precuneus
–cuneus
–insula
–cingulum
–uncus
A patient has ceased to understand speech after a hemorrhagic stroke. Where is the pathological center located?
+posterior parts of the superior temporal gyrus
–a medial surface of the superior temporal gyrus

–posterior parts of the middle temporal gyrus
–superior parietal lobule
–posterior parts of the inferior frontal gyrus
Dilated 1–3 ventricles were revealed in the patient with brain tumour after special x–ray examination. Specify the most probable localization of the tumour:
+mesencephalon
–telencephalon
–pedulla oblongata
–pons
–cerebellum

SENSE ORGANS

In the patient, suffering from diabetes mellitus, inflammation of the sebaceous glands (glands of Zeis) of the upper eyelids occurs periodically. What nerve supplies the upper eyelid?
+n. ophtalmicus
–n. oculomotorius
–n. abducens
–n. trochlearis
–n. infraorbitalis
A patient has stable strabismus of the right eye, the ability to abduct the eye is lost after a cerebral hemorrhage. What nucleus of the cranial nerve is damaged by hemorrhage?
+n. abducens dexter
–n. facialis dexter
–n. oculomotorius
–n. abducens sinister
–n. trochlearis
A patient has a convergent strabismus of the right eye after a craniocerebral trauma. What cranial nerve damage has resulted in such visual consequence?
+n. abducens
–n. oculomotorius
–n. trochlearis
–n. trigeminu
–n. facialis
A patient has signs of loss of the vision and optic reflex. What nuclei of the brainstem are damaged?
+nuclei of the superior colliculi of the tectal lamina
–nuclei of the third cranial nerve
–nuclei of the inferior colliculi of the tectal lamina
–nuclei of the trochlear nerve
–nuclei of the abducent nerve
A patient has accommodation disorder of the eyes, bilateral ptosis (drooping of the upper eyelids), and divergent strabismus. Pupils are expanded. Nuclei of which cranial nerves are affected?
+CNIII
–CNIV
–CNV
–CNVI
–CNVII
Damage to the external wall of the orbit is detected in a patient. The victim can not abduct the eyeball on the injured side. What nerve could be affected in this case?
+n. abducens
–n. trochlearis
–n. oculomotorius

–n. ophthalmicus
–chorda tympani

A patient has drooping eyelids, inability to turn eyes upwards and inwards, expanded pupils which do not react to light. What nerve is damaged?

+oculomotor
–trochlear
–abducent
–optic
–trigeminal

A patient has accommodation disoders of the eyes and expanded pupils, which do not react to light. Function of which muscles is disturbed?

+m. sphincter pupillae, m. ciliaris
–m. dilatator pupillae, m. ciliaris
–m. oliquus superior, m. ciliaris
–m. rectus lateralis, m. sphincter pupillae
–m. sphincter pupillae, m. dilatator pupillae

Loss of medial visual fields caused by a tumour of the hypophysis is revealed in a patient. What part of visual pathways is compressed by tumour?

+chiasma opticum
–n. opticus
–tractus opticus
–corpus geniculatum mediale
–corpus geniculatum laterale

A three–year–old child has entered a hospital with the diagnosis of a divergent squint. What nerve is damaged?

+oculomotor
–optic
–trochlear
–abducent
–ophthalmic

A patient has a drooping upper eyelid (ptosis) and strabismus. Dysfunction of what nucleus is assumed by the doctor?

+motor nucleus of the oculomotor nerve
–motor nucleus of the trigeminal nerve
–subcortical visual nuclei
–motor nucleus of the facial nerve
–cortical visual center

A patient complains of a strong headache, pain in eyes after excessive close work and blurred vision during reading. What eye muscle is defeated?

+sphincter muscle of pupil
–dilator muscle of pupil
–superior oblique muscle
–inferior oblique muscle
–orbital muscles

During clinical examination of the patient, a deviation of the left eyeball medially and inability of abduction is revealed. What muscle is affected?

+lateral rectus muscle
–superior rectus muscle
–medial rectus muscle
–inferior oblique muscle
–levator palpebrae muscle

Accommodation disorder of the eyes and pathology of the ligament, running from the lens capsule to the ciliary body, were observed in the patient. What ligament is affected?

+zonula ciliaris

–ligamentum lentis
– ligamentum capsularis
– ligamentum pectinatum iridis
–corpus vitreum

The diagnosis of coloboma (cleft) was made after clinical examination of the patient. What tunic of an eyeball is affected?

+iris
–ciliary body
–cornea
–retina
–sclera

The diagnosis of cataract was made after clinical examination of the patient. What structures of an eyeball can be affected by such pathology?

+lens
–corpus ciliare
–corpus vitreum
–iris
–cornea

A patient complains of abnormal accommodation. What structure is responsible for an accommodation and is injured in the patient?

+lens and a ciliary body
–anterior chamber of an eye
–iris
–vitreous body
–posterior chamber of an eye

Dysfunction of receptors which are responsible for color perception was revealed after the retina examination of the patient. What receptors are damaged?

+cones
–rods
–bipolar cells
–multipolar cell
–ganglionic cells

Eye examination of the patient has revealed intraocular pressure increase. What liquid outflow disoder has evoked that condition?

+aqueous humor
–perilymph
–endolymph
–lymph
–tear

Fast dilation (widening) of the pupil (mydriasis) has occured following the application of atropine eye drops. What muscle stops working?

+pupil sphincter muscle
– pupil dilator muscle
–ciliary muscle
–all rectus muscles
–all oblique muscles

The pupillary reflex is broken in the patient. The pupils are small, the patient badly orientates himself in the dark. What muscle of an eyeball function is broken?

+m. dilatator pupillae
–m. obliquus bulbi inferior
–m. sphincter pupillae
–m. ciliares
–m. obliquus bulbi superior

A patient has hearing loss. What anatomical structure does not participate in conduction of mechanical vibrations to Corti's organ?
+scala vestibuli
–ossicula auditus
–membrana tympani
–scala tympani
–tuba auditiva
A patient complains of giddiness, nausea, and balance disoder after trauma to the head. What structure of inner ear produces such symptoms?
+vestibular apparatus
–membrana tympani
–labyrinthus osseu
–organum spirale
–canalis longitudinalis modioli
A child has an increase of the pharyngeal tonsil closing-the pharyngeal aperture of the auditory tube. What wall of the tympanic cavity does the auditory tube open?
+paries caroticus
–paries jugularis
–paries labyrinthicus
–paries mastoideus
–paries tegmentalis
A child complains of cold in the head and pain in the ear. Through what aperture of the pharynx the infection has got to the tympanic cavity and caused its inflammation?
+pharyngeal opening of auditory tube
–tympanic opening of auditory tube
–choanae
–fauces
–aperture of larynx
A child has signs of inflammation of the cranial dura mater after otitis media with purulent effusion (inflammation of the middle ear). What way could the infection be distributed?
+through the vestibular aqueduct
–through the cochlear fenestra
–through canaliculus tympanicus
–through the vestibular fenestra
–through the cohlear canaliculus
A child has enlarged tubal tonsil, blocking pharyngeal opening of the auditory tube. What does the auditory tube connect the cavity of pharynx with?
+ tympanic cavity
– laryngeal cavity
– internal ear
– nasal cavity
– mouth
The superior wall of the tympanic cavity is destroyed by pus because of otitis media with purulent effusion. Which cranial fossa distributes pus from tympanic cavity?
+middle cranial fossa
–posterior cranial fossa
–anterior cranial fossa
–orbit
–pterygopalatine fossa
Inflammation of the tympanic cavity is complicated by an inflammation of the dura mater. What wall of the tympanic cavity can the infection penetrate into a cranial cavity?
+superior wall
–inferior wall
–lateral wall

–medial wall
–posterior wall
A patient has tonsillitis which is complicated by an acute otitis media (inflammation of the tympanic mucosa). What are the anatomic preconditions for this process?
+eustachian tube
–Waldayer`s–Pirogov tonsillar ring
–fallopian tubes
–congenital anomalies of the pharynx
–piriform sinus
Inflammation of the middle ear was complicated by mastoiditis. Later on, there was a threat of a purulent clotage of the nearest venous sinus. What sinus was affected?
+sigmoid sinus
–inferior petrosal sinus
–superior sagittal sinus
–transverse sinus
–sinus rectus
Inflammation of the middle ear of a child began from nasopharyngeal inflammation. What canal of the temporal bone allows the infection to penetrate to the tympanic cavity?
+musculotubal canal
–carotid canal
–canaliculus of chorda tympani
–canaliculus tympanicus
–caroticotympanic canaliculi
A patient has worsened olfaction after traumatic injury of the temporal area of the head. What anatomic structure is injured?
+uncus
–fila olfactoria
–trigonum olfactorium
–buldus olfactorius
–tractus olfactorius
The olfactory fibers leaving a nasal cavity were broken because of trauma. What bone do these fibers pass through?
+ethmoid bone
–sphenoid bone
–maxilla
–inferior nasal concha
–nasal bone
A patient recuires a nail plate of the right thumb to be removed. What pecularities of the anatomic structure of the nail the surgeon should take into account during operation?
+the nail is an epidermal derivative
–the nail is an osteal tissue growth
–the nail is a cartilaginous plate
–the nail is a growth of tendons
–the nail is a dermal derivative
The sebaceous glands have not been revealed in the skin test during medicolegal investigation. What part of the body does the delivered material belong to?
+sole of the foot
–transitional zone of the lips
–glans of penis
–skin of the mammary gland
–skin of the scrotum
The diagnosis of gynecomastia was made to a young man during medical examination in the recruiting office. What are symptoms and causes of this disoder?
+development of mammary glands due to high estrogen level as in female

–absence of hair
–development of the additional mammary glands
–diminution of working sweat glands
–formation of false pudendal lips

A young woman has addressed to a beauty clinic. She considers her mammary glands to be posed too low. What level are the mammary glands should be located to be normal?

+ ribs 3 – 6
– ribs 4 – 7
– ribs 2 – 5
– ribs 3 – 4
– ribs 4 – 6

The surgeons prefer radial incisions in the surgery of mammary glands. What anatomical features underlie such surgical technique?

+the apices of the lobules converge on the nipple of the breast
–the bases of the lobules are inverted nipples
–the lobules are placed transversely
–the lobules are placed vertically
–the lobules are placed horizontally

A 42 year–old woman addressed to the surgeon concerning an induration in the right mammary gland. What normal amount of lobules should be in mammary glands?

+15–20 lobules
–25–30 lobules
–4–6 lobules
–6–8 lobules
–10–12 lobules

A patient has taste disturbance. But the tongue still has tactile, pain and temperature sensitivity. What papillae of the tongue are not gustatory?

+filiform papilla
–vallate papilla
–fungiform papilla
–foliate papilla

A young mother complained on absence of tears when her 2–week–old baby was crying. When do the lachrymal glands start to work in newborn babies?

+since 3 weeks old
–about 2 months old
–about 6 months old
–since 8 weeks old
–right after birth

A brain tumor, which is located in the site of the left optic tract, is found in the patient. What vision disorder can be observed in the patient?

+loss of vision in the lateral half of the visual field of the left eye and in the medial half of the visual field of the right eye
–loss of vision in the left half of the visual field of both eyes
–loss of vision in the right half of the visual fields of both eyes
–loss of vision in both halves of the visual fields of the left eye
–loss of vision in both halves of the visual fields of the right eye

Due to trauma, the different diameter of pupils (anisocoria) is observed in the patient. What muscle activity is blocked?

+musculus sphincter pupillae
–musculus ciliaris
–musculus dilatator pupillae
–musculus rectus superior
–musculus rectus inferior

A 50–year–old patient complains of narrow vision getting worse. Which muscle fibres become worse?
+meridional fibers of the ciliary muscle
–circular fibers of a ciliary muscle
–radial fibers of the iris
–circular fibers of the iris
–sceletal muscles of the eye
A patient has a tumor of the superior nasal meatus. What symptoms can we recognize?
+olfactory disorders
–taste disorder
–respiratory disorders
–swallowing disorders
–disorders of salivation
A patient has glaucoma. The damage of what structure in the wall of an eyeball causes permanent obstruction of aqueous outflow from the anterior chamber?
+venous sinus
–vascular coat
–posterior corneal epithelium
–ciliary body
–ciliary muscle
The diagnosis of a right–hand mastoiditis was made to the patient. Specify the most probable source of purulence in the mastoid air cells:
+from the tympanic cavity
–from sterno–cleido–mastoid muscles
–from spongy substance of the occipital bone
–from subcutaneous fatty tissue
–from middle cranial fossa
A doctor diagnosed hidradenitis suppurativa (inflammation of sudoriferous sweat glands located in the axillary fossa). In what skin layer are the sudoriferous glands located?
+in the reticular dermis
–on the border between the epidermis and derma
–in the papillary derma
–in the epidermis
–in the subcutaneous adipose tissue
An anaesthesiologist monitors pupillary light response during anaesthesia. What nuclei in the brainstem are responsible for pupillary reaction to light?
+nucleus of the superior collicuus
–nucleus ambigus
–nucleus of the lateral geniculate body
–accessory nucleus of the oculomotor nerve
–motor nucleus of the trigeminal nerve
A diagnosis of chronic rhinitis (inflammation of the nasal mucosa) was made to a patient. Derangement in olfaction was detected. What nervous structures are damaged?
+ olfactory nerve receptors
–olfactory bulb
–olfactory tract
–cingulate gyrus
–septum pellucidum
A victim has lost the abiliuty to lift the right eyelid and the right eye after trauma to the superior wall of the right orbit. What nerve is damaged?
+superior ramus of the oculomotor nerve
–inferior ramus of the oculomotor nerve
–trochlear nerve
–abducens nerve

–ophthalmicus nerve

Loss off vision of the right halves of both eyes retina is detected in a patient. The patient has no ocular pathology. Where can the damage be located most probably?

+at the right cortical end of the visual analyzer
–at the left cortical end of the visual analyze
–at the optic chiasm
–in an optic nerve
–in the retina

Loss of vision in the medial half of the vision field of both eyes is detected in the patient. What part of the visual pathway is damaged?

+chiasma opticus
–nervus opticus
–tractus opticus
–sulcus calcarinus
–retina

Divergence insufficiency is detected in the patient. What muscles of the eyeball are damaged?

+ rectus lateralis
–rectus medialis
–rectus superior
–rectus inferior
–obliqus oculi superior

A patient has loss of hearing in the left ear. Where are nuclei of the damaged nerve located?

+vestibular area of the rhomboid fossa
–hypothalamus
–diencephalon
–midbrain
–pedunculi cerebri

A patient has dysfunction of postural orientation and equilibrium. What nuclei of the brainstem are damaged?

+vestibular nuclei
–nucleus of the facial nerve
–nuclei of the medial geniculate body
–motor nucleus of the eleventh cranial nerve
–nuclei of the lateral geniculate body

A patient has hearing loss because of CN VIII damage. Where are the first–order neuron of the auditory pathway located?

+ganglion spirale
–ganglion trigeminale
–ganglion vestibulare
–ganglion geniculi
–ganglion ciliare

A patient complains of giddiness and loss of hearing in the right ear. What nerve is damaged?

+right vestibulocochlear nerve
–left vestibulocochlear nerve
–hypoglossal nerve
–vagus nerve
–trochlear nerve

A patient has hearing loss because of the CNVIII damage. Where are the second-order neuron of the auditory pathway located?

+nucleus cochlearis ventralis et dorsalis
–nucleus cochlearis lateralis et medialis
–nucleus cochlearis accessorius
–nucleus vestibularis lateralis et medialis
–nucleus vestibularis ventralis et dorsalis

PERIPHERAL NERVE SYSTEM

After a knife wound of an external surface of a right knee joint below the head of fibula the foot hangs down, is flexed, the dorsal flexion is impossible. What nerve is damaged?
+ N. peroneus communis
– N. tibialis
– N. cutaneus surae lateralis
– N. peroneus superficialis
– N. peroneus profundus

The damage of posterior fascicles of the brachial plexus is revealed in the victim. What muscles group functions will be broken at the upper limb?
+ Muscles of a posterior group of the forearm
– Anterior group of forearm muscles
– Muscles of thenar
– Muscles of hypothenar
– Anterior group of shoulder muscles

The impossibility to hand pronation is exposed in the patient with a cutting wound in the left axillary region. What nerve is damaged?
+ N. medianus
– N. ulnaris
– N. radialis
– N. cutaneus brachii medialis.
– N. cutaneus antebrachii medialis

The patient has breach of function of lateral group flexor muscles after a trauma of a forearm. What nerve is damaged?
+ N. medianus
– N. ulnaris
– N. radialis
– N. musculocutaneus
– N. cutaneus antebrachii

The victim has damaging of the vessel which passes together with n. axillaris through the foramen quadrilaterum. What is the vessel?
+ Circumflexa humeri posterior
– Brachialis
– Circumflexa humeri anterior
– Profunda brachii
– Circumflexa scapulae

The patient has "monkey hand". What nerve is damaged?
+ Median
– Musculocutaneous
– Radial
– Axillary
– Ulnar

In a patient with the neuritis of a femoral nerve flexion of a hip and an extension of a leg in a knee the joint is broken. Which muscle function is broken?
+ Musculus quadriceps femoris

– Semitendinous muscle
– Triceps femoris muscle
– Semimembranosus muscle
– Musculus biceps femoris

The patient has neuritis of the femoral nerve. What movement cannot be carried out?
+ Extension of a knee joint
– Plantar flexion of foot
– Flexion of a knee joint
– Dorsal flexion of foot
– Pronation of foot

The skin sensitivity is absent on the medial surface of a thigh and there is impossibility of adduction of the right lower extremity to the midline. What nerve is injured?
+ N. obturatorius
– N. ischiadicus
– N. femoralis
– N. genitofemoralis
– N. ilioinguinalis

The victim has a deep wound on an external surface of a right leg. The impossibility of extension of the foot is revealed. What nerve is damaged?
+ N. peroneus profundus
– N. peroneus superficialis
– N. peroneus communis
– N. peroneus longus
– N. peroneus brevis

The infringement of skin sensitivity on a posterior surface of a leg is revealed in a patient. What nerve is damaged?
+ Sciatic nerve
– Posterior cutaneous nerve of the thigh
– Femoral nerve
– Obturator nerve
– Inferior gluteal nerve

The patient is diagnosed with neuritis of the tibial nerve. Which of the listed functions is broken?
+ Plantar flexion of the foot
– Dorsal flexion of the foot
– Extension in a knee joint
– Flexion in a knee joint
– Extension of toes

The palpation around of the anus and the external sphincter of a rectum is painful in a patient. What nerve is damaged?
+ N. pudendus
– N. ischiadicus
– N. femoralis
– N. tibialis
– N.obturatorius

The patient is diagnosed with neuritis of the common fibular nerve. Which of the listed functions is broken?
+ Dorsal flexion of the foot
– Plantar flexion of the foot
– Extension in a knee joint
– Flexion in a knee joint
– Extension of toes

In the patient the right superior ganglion of the sympathetic trunk was involved in a tumoral process. What symptom will be observed?
+ Constriction of the right pupil
– Accommodation disorder at the left
– A paralysis of a medial rectus muscle of the right eyeball
– Mydriasis (dilation of a pupil) at the right
– Disorder of a lacrimation at the right

The victim with a broken function of extension in a hip joint is delivered to the traumatology department. What nerve is injured in the victim most likely?
+ Superior gluteal
– Sciatic
– Obturator
– Pudendal
– Femoral

The patient has impossible flexion of a forearm in a position of supination, the absence of cutaneous sensitivity on the anterolateral surface of the forearm. What nerve is damaged?
+ Musculocutaneus
– Ulnar
– Radial
– Median
– Axillary

Regular excursions of a diaphragm were broken because of an operational trauma of soft tissues of a neck on the right side. What nerve has suffered?
+ N. phrenicus dexter
– N. intercostales
– N. vagus
– N. accessorius
– Rr. dorsales nervi spinalis

The patient has lost an opportunity to flex a forearm in the elbow joint. The skin sensitivity of anterolateral surface of a forearm was broken. What nerve was damaged?
+ N. musculocutaneus
– N. radialis
– N. ulnaris
– N. medianus
– N. axillaris

The patient complains about disorder of the skin sensitivity on a medial part of a dorsal and palmar surface of a hand. What nerve is damaged?
+ N. ulnaris
– N. medianus

– N. musculocutaneus
– N. cutaneus antebrachii medialis
– N. radialis

The active extension of a leg in a knee joint is absolutely impossible in the patient. The looseness of patella appeared. What nerve damage is possible?
+ Femoral
– Obturator
– Sciatic
– Superior gluteal
– Inferior gluteal

The patient had a pricking of the skin on a medial surface of the forearm after a trauma of a posteriomedial surface of the humerus. Which of nerves is damaged?
+ N. cutaneus autebrachii medialis
– N. musculocutaneus
– N. dorsalis scapularis
– N. subscapularis
– N. radialis

The patient complains about the increased pain of the skin of an auricle and an external acoustic meatus. Which of nerves is damaged?
+ N. auricularis magnus
– N. occipitalis minor
– Nn. supraclaviculares
– N. vagus
– N. transversus colli

The sensitivity of the skin of anterior and lateral surfaces of a neck is reduced in the patient after the operation. What nerve provides the sensitivity of this area of a neck?
+ N. transversus colli
– N. auricularis magnus
– Nn. supraclaviculares
– N. occipitalis minor
– N. phrenicus

The patient has a hyperesthesia of the skin at the medial surface of the arm. What nerve is injured?
+ Medial cutaneous nerve of the arm
– Median nerve
– Ulnar nerve
– Radial nerve
– Axillary nerve

The patient complains to a stomatologist about extra salivation. What vegetative ganglion stimulation can hyperproduction of serous saliva cause?
+ Ganglion oticum
– Ganglion pterygopalatinum
– Ganglion submandibulare
– Ganglion ciliare
– Ganglion sublinguale

A radiograph shows enlarged lymph nodes in the region of roots of the lungs which press the heart. What nerves are squeezed?
+ Rr. cardiaci n. vagi
– N. phrenicus
– Nn. intercostales
– Truncus sympaticus
– N. splanchnicus major

The victim has anaesthesia of the 5th and half of the 4th fingers on a palmar surface, and half of the 3rd, 4th and 5th on a dorsum. What nerve is injured?
+ Ulnar
– Radial
– Musculo-cutaneous
– Median
– Medial cutaneous nerve of a forearm

In a man, who has a fracture of the right humerus in the middle third of the humeral diaphysis with displaced fragments, fingers of the right hand do not extend. What nerve is damaged?
+ Radial
– Ulnar
– Median
– Musculo-cutaneous
– Axillary

The patient complains about a loss of the skin sensation on the posterior middle and inferior thirds of the leg. What nerve is damaged?
+ N. suralis
– N. cutaneus femoris posterior
– N. saphenus
– N.obturatorius
– N. tibialis

The patient cannot flex a forearm and has loss of sensation on anterior-lateral surface of the forearm. What nerve is damaged?
+ Musculo-cutaneous
– Axillary
– Radial
– Median
– Ulnar

A loss of sensation of the 4th and 5th fingers is revealed in the patient after the trauma of the medial humeral epicondyle. What nerve is injured?
+ Ulnar
– Radial
– Median
– Medial cutaneous nerve of the forearm
– Musculo-cutaneous

The patient has lost ability to hold pronated foot. What nerve is injured?
+ Superficial peroneal
– Deep peroneal
– Tibial

– Sciatic
– Common peroneal

After the trauma of soft tissues of the neck the respiratory excursion of the diaphragm was disturbed in the victim. What nerve was injured during the operation?
+ N. phrenicus
– N. vagus
– N. accessorius
– Rr. dorsales nervi spinalis
– N. intercostales

What nerve can be damaged under removal of the great saphenous vein (v. saphena magna)?
+ N. saphenus
– N. cutaneus surae medialis
– N. peroneus superficialis
– N. cutaneus surae lateralis
– N. tibialis

A patient has a loss of skin sensation at the pubis and external genital organs after appendectomy. What nerve branches were damaged during operation?
+ Ilio-inguinal
– Obturator
– Femoral
– Genito-femoral
– Ilio-hypogastric

A patient has loss of a skin sensation in anterior-medial surface of the leg. What nerve is injured?
+ Saphenus
– Obturator
– Sciatic
– Lateral cutaneous nerve of thigh
– Common fibular

Disturbance of the tactile and temperature sense in the region of inferior 2/3 of the lateral surface of the thigh (Roth's disease) is caused by damage of the:
+ Lateral cutaneous nerve of thigh
– Genito-femoral nerve
– Femoral nerve
– Sciatic nerve
– Tibial nerve

A patient feels a pain in the region of anterior surface of the thigh, and he has atrophy of quadriceps femoris muscle. What nerve is injured?
+ Femoral
– Obturator
– Sciatic
– Tibial
– Common fibular

A patient cannot flex the foot and toes, and abduct the foot. He complains about loss of sensation on the sole and lateral edge of the foot. What nerve is damaged?
+ Tibial nerve

– Common fibular nerve
– Femoral nerve
– Obturator nerve
– Inferior gluteal nerve

The patient has signs of loss of the visual watch reflex. What nuclei of the brainstem are damaged?
+ Nuclei of superior colliculi of tectal lamina
– Nuclei of the third cranial nerve
– Nuclei of the inferior colliculi of tectal lamina
– Nuclei of the trochlear nerve
– Nuclei of the abducent nerve

The patient has infringements of an accommodation, bilateral ptosis (droped upper eyelids), divergent strabismus. Pupils are dilated. Which of cranial nerves nuclei are affected?
+ III
– IV
– V
– VI
– V1I

The patient has an inflammation of the maxillary nerve. What foramen of the sphenoid bone does the nerve pass through?
+ Rotundum
– Oval.
– Jugulare
– Venosus
– Spinosus

The victim has the left-side splintered fracture of the zygomatic bone with loss of skin sensitivity above it. What nerve is injured?
+ Zygomaticofacial nerve
– Facial nerve
– Infraorbital nerve
– Buccal nerve
– Pes anserinus minor

A doctor injects an anesthetic solution into the infraorbital foramen. What nerves are thus anesthetized?
+ Infraorbital nerve and anterior superior alveolar branches
– Abducent nerve
– Oculomotor nerve
– Trochlear nerve
– Mandibular nerve and motor branches

The patient has an asymmetry of the face especially at attempts to make active contractions of facial muscles. What nerve damage should a doctor think about?
+ Facial – its motor fibers
– Trigeminal – the 1st branch (ophtalmic)
– Trigeminal – the 2nd branch (maxillary)
– Trigeminal – the 3rd branch (mandibular)
– Hypoglossal

The boxer has left-side paralysis of muscles of the facial expression after a blow at the parotid area. What nerve is damaged?
+ Facial
– Lesser petrosal nerve
– Ophtalmic
– Maxillary
– Mandibular

After the operation, the peristalsis of the stomach and a secretion of its glands has slowed down, and the sphincter muscle of pylorus has weakened. What nerve has been damaged?
+ Vagus nerve
– Accessory nerve
– Glossopharyngeal nerve
– Trigeminal nerve
– Trochlear nerve

The patient has a functional disorder of the parotid gland. What nerve intensifies secretion of the parotid gland?
+ N. petrosus minor
– N. auricularis major
– N. petrosus major
– N. petrosus profundus
– N. auricularis minor

The patient complains about the pain in the root of the tongue and palatine tonsiles. What nerve innervates these areas?
+ Glossopharyngeal
– Hypoglossal
– Accessory
– Trigeminal
– Trochlear

The patient has a thrombosis of a sigmoid sinus in the place of a jugular foramen. Thus, IX, X, XI, pairs of cranial nerves are involved. What are muscles of the neck involved?
+ Mm. trapezius, m. stenocleidomastoideus
– M. sternohyoideus
– M. scalenus anterior
– M. scalenus posterior
– M. omohyoideus

The patient complains about difficulty rising the right upper extremity above a horizontal level. What nerve is damaged?
+ Right accessory nerve
– Left accessory nerve
– Greater pectoral nerve
– Lesser pectoral nerve
– Right vagus nerve

The patient cannot turn the head to left and throw it back. What nerve is injured?
+ Right accessory
– Greater pectoral
– Left accessory

– Lesser pectoral
– Right vagus

The patient has deviation of the apex of the tongue to the right. What cranial nerve motor innervation is broken in this case?
+ N. hypoglossus dexter
– N. glossopharingeus dexter
– N. vagus dexter
– N. trigeminus sinister
– N. facialis sinister

During the stomatologic manipulations the fibers of CN12 were damaged at the left side. What are the symptoms?
+ Deformity of tongue muscles contraction at the left
– Deformity of soft palate muscles contraction
– Deformity of a larynx muscles contraction
– Deformity of suprahyoid muscles contraction
– Deformity of pharynx muscles contraction

The patient says the words with effort, and also complains about difficulty in swallowing. What nerve damage has caused such clinic symptoms?
+ N. vagus
– N. facialis
– N. glossopharyngeus
– N. accessorius
– N. hypoglossus

The patient has an increased secretion of the parotid gland. What nucleus stimulation can cause this?
+ Nucleus salivatorius inferior
– Nucleus solitarius
– Nucleus salivatorius superior
– Nucleus ambiguus
– Nucleus dorsalis n. vagi

In the patient, a lens accommodation disorder caused by damage of the function of a vegetative ganglion caring out parasympathetic innervation of m. ciliaris. What is the ganglion?
+ G. ciliare
– G. pterygopalatinum
– G. oticum
– G. submandibulare
– G. sublinguale

A doctor has detected an atrophy of the muscles of mastication in the patient. What cranial nerve branches does this group of muscles innervate?
+ N. trigeminus
– N. ophthalmicus
– N. glossopharyngeus
– N. vagus
– N. facialis

Which of nerves can be damaged because of the highmoritis (inflammation of the maxillary sinus mucosa)?
+ Nn. alveolares superiores
– N. oculomotorius
– N. facialis
– N. mandibularis
– N. ophthalmicus

The patient with an inflammation mucosa of the tongue complains about a disorder of the general sensitivity of the anterior two thirds of the tongue. What nerve is damaged?
+ Lingual
– Tympanic
– Chorda tympani
– Vagus
– Glossopharyngeal

Disorder of salivation and taste is detected in the patient with an inflammation of the middle ear. What nerve is injured?
+ Chorda tympani
– Tympanic
– Lingual
– Glossopharyngeal
– Vagus

In the patient, the right nasolabial fold is flattened, the right eyelids are not closed. There are difficulties during talking, smiling, whistling. What nerve is struck?
+ N. facialis dexter
– N. abducens dexter
– N. glossopharyngeus sinister
– N. vagus dexter
– N. glossopharyngeus dexter

The patient has a masklike [Parkinson's] face after grippe: the lowered angles of a mouth and lowered eyelids, flattened nasolabial folds. What nerve is damaged?
+ N. facialis
– Maxillary
– Mandibular
– Greater petrosal
– N. vagus

The male patient has gone to hospital with complaints about anesthesia of posterior 1/3 of the tongue. What cranial nerve's function is broken?
+ IX
– X
– VII
– V
– XI

The patient has difficulties during swallowing concerned with paralysis of the soft palate. What nerve is damaged?
+ III branch of the trigeminal nerve
– Facial nerve

– I branch of the trigeminal nerve
– II branch of the trigeminal nerve
– Hypoglossal nerve

The patient feels the pain and numbness of the gingival mucosa of the upper jaw. The damage of what nerves can cause these signs?
+ Nn. alveolaris superiores (n. maxillaris)
– N. facialis
– N. glosspharyngeus
– N. vagus
– N. ophtalmicus

Irritation of what nerve might cause an appearance of a hoarse voice in the patient with aneurism of the right subclavian artery?
+ N. laryngeus reccurens dexter
– N. laryngeus inferior sinister
– N. laryngeus superior dexter
– N. laryngeus reccurens sinister
– N. laryngeus superior sinister

The patient has a loss of sensation of the anterior 2/3 of the tongue. The taste sensation is persisted. What nerve is damaged?
+ Lingual nerve before joining chorda tympani
– Hypoglossal
– Chorda tympani
– Lingual nerve after joining chorda tympani
– Glossopharyngeal

The patient does not feel bitter, the tactile sensitivity of a posterior third of the tongue is disturbed. What nerve is involved in the pathological process?
+ Glossopharyngeal
– Hypoglossal
– Lingual
– Facial
– Trigeminal

The patient had been undergone a resection of a thyroid gland. The hoarseness was observed long time after the operation. What nerve was damaged during the operation?
+ Recurrent laryngeal
– Hypoglossal
– Superior laryngeal
– Mandibular
– Lingual

The patient complains about dryness in a mouth, reduction of salivation. What nerves are injured?
+ Parasympathetic fibers of the chorda tympani
– Motor fibers of the hypoglossal nerve
– Sensory fibers of the lingual nerve
– Parasympathetic fibers of the vagus nerve
– Sympathetic fibers of the sympathetic trunk

The victim has a fracture and haemorrhage at an anterior third of the mandible, a loss of the skin sensitivity at a chin. What nerve is injured?

+ N. alveolaris inferior
– N. transversus coli
– N. alveolaris superior
– N. buccalis
– N. mylohyoideus