A patient has the affection of the head of the femur of ischemic origin diagnosed. Which artery is damaged?

**Ramus acetabularis**
- A. femoralis
- A. iliaca externa
- A. profunda femoris
- A. umbilicalis

A 70-year-old female patient was diagnosed with fracture of left femoral neck accompanied by disruption of ligament of head of femur. The branch of the following artery is damaged:

**Obturator**
- Femoral
- External iliac
- Inferior gluteal
- Internal pudendal

Specify parts of the aorta.

**The ascending, the arch and the descending parts**
- The cervical, the petrous, the cavernous and cerebral parts
- The prevertebral, the cervical, the atlantic and intracranial parts
- The cervical, the atlantic and intracranial parts
- The cerebral part

Specify parts of the descending aorta.

**The thoracic and abdominal parts**
- The cervical, the petrous, the cavernous and cerebral parts
- The prevertebral, the cervical, the atlantic and intracranial parts
- The cervical, the atlantic and intracranial parts
- The ascending, the arch and the descending parts

The narrowing of large vessel caused worsening of outflow of blood from the left ventricle. Which vessel has undergone pathological changes?

**Aorta**
- Pulmonary trunk
- Pulmonary vein
- Superior vena cava
- Inferior vena cava
A woman underwent an operation because of extrauterine (tubal) pregnancy. In course of the operation the surgeon should ligate the branches of the following arteries:

**Uterine and ovarian**
Superior cystic and ovarian
Inferior cystic and ovarian
Uterine and superior cystic
Uterine and inferior cystic

Specify the terminal branches of the abdominal aorta.

**The right and left common iliac arteries**
The median sacral artery
The left gastric artery
The lateral sacral artery and lumbar arteries
The coeliac trunk and superior mesenteric artery

Sick woman, 48 years old, needs in surgical intervention for ovarian neoplasms. Surgeon should remember that the ovary is blood supplied by anastomosing branches of large arterial vessels. What are they?

**Pars abdominalis aortae et a. iliaca interna**
Pars abdominalis aortae et a. iliaca externa
A. iliaca interna et a. iliaca externa
A. mesenterica inferior et a. iliaca interna
A. mesenterica inferior et a. iliaca externa

Sick woman, 57 years old, needs in surgical intervention for uterine neoplasms. Surgeon should remember that the uterus is blood supplied by branches of large arterial vessel. Specify its source.

**A. iliaca interna**
A. iliaca externa
Pars abdominalis aortae
A. mesenterica inferior
A. mesenterica superior

The patient was taken to hospital with a diagnosis - rupture of the femoral head. Which artery is violated in this case?

**Acetabular artery**
Superior gluteal artery
Lateral sacral artery
Iliopsoas artery
Inferior gluteal artery
The patient was delivered in the hospital with abdominal injuries. At the same time lateral umbilical fold was corrupted. Determine its contents.

**A. et V. epigastrica inferior**
A. umbilicalis
A. et V. epigastrica superior
Urarchus
A. et V. epigastrica superficialis

The patient was delivered in the hospital with abdominal injuries. At the same time medial umbilical fold was corrupted. Determine its contents.

**A. umbilicalis**
A. et V. epigastrica inferior
A. et V. epigastrica superior
Urarchus
A. et V. epigastrica superficialis

Skeletotopy of the bifurcation of the abdominal aorta.

**L4**
Th12
L2
Th10
L3

Specify the branch that there is not the branch of the internal iliac artery.

**Inferior epigastric artery**
Superior gluteal artery
Iliolumbar artery
Acetabular artery
Inferior gluteal artery

Specify the parietal branches of the internal iliac artery.

**Iliolumbar artery, superior gluteal artery, lateral sacral artery, obturator**
Uterine artery, inferior vesical artery, umbilical artery, middle rectal artery, internal pudendal artery
Iliocolic artery, inferior mesenteric artery
Inferior epigastric artery, deep circumflex iliac artery
Inferior phrenic artery

Specify the visceral branches of the internal iliac artery.

**Uterine artery, inferior vesical artery, umbilical artery, middle rectal artery, internal pudendal artery**
Iliolumbar artery, superior gluteal artery, lateral sacral artery, obturator
Iliocolic artery, inferior mesenteric artery
Inferior epigastric artery, deep circumflex iliac artery
Inferior phrenic artery

Specify the branches of the external iliac artery.
**Inferior epigastric artery, deep circumflex iliac artery**
Uterine artery, inferior vesical artery, umbilical artery, middle rectal artery, internal pudendal artery
Iliocolic artery, inferior mesenteric artery
Iliolumbar artery, superior gluteal artery, lateral sacral artery, obturator
Inferior phrenic artery

Specify source of the superior vesical artery.
**Umbilical artery**
Iliolumbar artery
Iliocolic artery
Internal pudendal artery
Inferior phrenic artery

Specify anastomoses that can be cause of the «corona mortis».
**A. iliaca interna et a. iliaca externa**
Pars abdominalis aortae et a. iliaca externa
Pars abdominalis aortae et a. iliaca interna
A. mesenterica inferior et a. iliaca interna
A. mesenterica inferior et a. iliaca externa

Specify branches, which form anastomoses that can be cause of the «corona mortis».
**Obturator artery and inferior epigastric artery**
Uterine artery and umbilical artery
Iliocolic artery and inferior mesenteric artery
Inferior epigastric artery and deep circumflex iliac artery
Inferior phrenic artery and lumbar artery

A patient has the ischemia of tissues below the knee-joint accompanied by intermittent claudication. Which artery occlusion is meant?
**Popliteal**
While examining a patient, a surgeon detects artery pulsation behind medial malleolus. Which artery is meant? **Posterior tibial**

A 45-year-old patient's skin of the right foot and leg is pale; there is pulsations of the dorsal artery of foot and posterior tibial artery. Pulsation of the femoral artery is preserved. Which artery is damaged? **Popliteal**

Examining blood supply a doctor detects pulsation of a large artery, which passes ahead of the talocrural joint between the tendons of the long extensor of the big toe and the long extensor of fingers in a separate fibrous canal. Which artery is this? **A. dorsalis pedis**

Examining blood supply of a foot a doctor detects pulsation of a large artery behind the malleolus medialis in a separate fibrous canal. Which artery is this? **A. tibialis posterior**

After resection of the middle third of a femoral artery, obstructed by a clot, a lower extremity is supplied with blood due to collateral anastomoses. Which artery is the most important for bloodstream restoration?
**Deep artery of thigh**
Superficial circumflex iliac artery
Descending artery of knee joint
Superficial epigastric artery
External pudendal artery

After resection of the middle third of femoral artery, obliterated by a thromb the lower extremity is supplied with blood due to the surgical bypass. Name an artery that plays the main role in reestablishment of blood flow:

**Deep femoral artery**
Superficial circumflex artery of hip bone
Descending genicular artery
Superficial epigastric artery
Deep external pudendal artery

Specify parts of the aorta.

**The ascending, the arch and the descending parts**
The cervical, the petrous, the cavernous and cerebral parts
The prevertebral, the cervical, the atlantic and intracranial parts
The cervical, the atlantic and intracranial parts
The cerebral part

Specify parts of the descending aorta.

**The thoracic and abdominal parts**
The cervical, the petrous, the cavernous and cerebral parts
The prevertebral, the cervical, the atlantic and intracranial parts
The cervical, the atlantic and intracranial parts
The ascending, the arch and the descending part

The narrowing of large vessel caused worsening of outflow of blood from the left ventricle. Which vessel has undergone pathological changes?

**Aorta**
Pulmonary trunk
Pulmonary vein
Superior vena cava
Inferior vena cava

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**Ramus acetabularis**
A. femoralis
A. iliaca externa
A. profunda femoris
A. umbilicalis

A 70-year-old female patient was diagnosed with fracture of left femoral neck accompanied by disruption of ligament of head of femur. The branch of the following artery is damaged:

**Obturator**
Femoral
External iliac
Inferior gluteal
Internal pudendal

Specify the branches of the external iliac artery.

**Inferior epigastric artery, deep circumflex iliac artery**
Uterine artery, inferior vesical artery, umbilical artery, middle rectal artery, internal pudendal artery
Iliocolic artery, inferior mesenteric artery
Iliolumbar artery, superior gluteal artery, lateral sacral artery, obturator
Inferior phrenic artery

Skeletotopy of the bifurcation of the abdominal aorta.

**L4**
Th12
L2
Th10
L3

Specify anastomoses that can be cause of the «corona mortis».

**A. iliaca interna et a. iliaca externa.**
Pars abdominalis aortae et a. iliaca externa
Pars abdominalis aortae et a. iliaca interna.
A. mesenterica inferior et a. iliaca interna.
A. mesenterica inferior et a. iliaca externa.

Specify branches, which form anastomoses that can be cause of the «corona mortis».

**Obturator artery and inferior epigastric artery**
Uterine artery and umbilical artery
Iliocolic artery and inferior mesenteric artery
Inferior epigastric artery and deep circumflex iliac artery
Inferior phrenic artery and lumbar artery
Specify artery that blood supply the hip joint.

**Obturator artery**
- Uterine artery
- Iliocolic artery
- Inferior epigastric artery
- Inferior phrenic artery

Specify artery that blood supply the iliacus and the muscles of the abdominal wall.

**Deep circumflex iliac artery**
- Uterine artery
- Iliocolic artery
- Obturator artery
- Inferior phrenic artery

The Victim was diagnosed a fracture of the body and the upper branch of the pubic bone, the fragments of damaged blood vessels that pass in the vascular lacuna. Which vessels are damaged?

- A. et V. femoralis
- A. et V. iliaca interna
- A. et v. iliaca externa
- A. et V. pudenda interna
- A. et V. epigastrica inferior

In patient was diagnosed ischemia of tissues below the knee, accompanied by "intermittent claudication". Occlusion of which artery can be thought of?

**The popliteal artery**
- The deep femoral artery
- Descending genicular artery
- Dorsal artery of foot
- The proximal part of the femoral artery

An injury of skin in the medial region of the sternocleidomastoid muscle caused air embolism. Which cervical vein was damaged?

**External jugular**
- Anterior jugular
- Internal jugular
Posterior auricular
Transverse cervical

A patient with a thymus tumor has cyanosis, extension of subcutaneous venous network, edema of soft tissues of the face, neck, upper half of the body, upper limbs. Which venous trunk is blocked?

**Superior vena cava**
External jugular vein
Subclavian vein
Internal jugular vein
Anterior jugular vein

A patient was admitted to an intensive therapy department with heavy poisoning. To provide infection it is necessary to catheterize the patient and inject medicines into subclavian vein. In what topographical place is it localized?

**Spatium anterscalenum**
Spatium retrosternocleidomastoideus
Spatium interscalenum
Spatium interaponeuroticum suprasternale
Trigonum ornotrapezoideum

A 70-y.o. man has cut an abscess off in the area of mastoid process during shaving. Two days later, he was admitted to the hospital with inflammation of arachnoid membranes. How did the infection penetrate into the cavity of skull?

**Vv. emissariae mastoideae**
Vv. labyrinthi
Vv. tympanicae
Vv. facialis
Vv. auriculares

Surgical approach to the thyroid gland from the transverse (collar) approach involves opening of interaponeurotic suprasternal space. What anatomic structure localized in this space is dangerous to be damaged?

**Jugular venous arch**
External jugular vein
Subclavicular vein
Inferior thyroid artery
Superior thyroid artery

Specify origins of the superior vena cava.

**Brachiocephalic veins**
Internal jugular veins
Azygos vein and hemiazygos vein
Pulmonary veins
Subclavian veins

Specify chamber of the heart which the superior vena cava flows into.
**Right atrium**
Left atrium
The right ventricle
The left ventricle
The left auricle

Specify chamber of the heart which the inferior vena cava flows into.
**Right atrium**
Left atrium
The right ventricle
The left ventricle
The left auricle

Specify tributaries of the superior vena cava.
**Brachiocephalic veins**
Hemiazygos vein and azygos vein
Subclavian veins
Mediastinal veins
Internal jugular veins

Specify tributaries of the brachiocephalic vein.
**Subclavian veins and internal jugular veins**
Hemiazygos vein and azygos vein
Mediastinal veins
Vertebral veins
Internal thoracic veins

Which triangle of the neck is situated internal jugular vein?
**Carotid**
Omolacuvicular
Submental
Submandibular
Omotrapezoid

What are the boundaries of the carotid triangle?
**Posterior belly of digastric, superior belly of omohyoid, sternocleidomastoid**
Posterior belly of digastric, inferior belly of omohyoid, sternocleidomastoid
Posterior belly of digastric, sternocleidomastoid
Anterior belly of digastric, superior belly of omohyoid, sternocleidomastoid
Anterior belly of digastric, thyrohyoid, sternocleidomastoid

Specify the length of the superior vena cava.

**5-6 cm**
3-4 cm
9-12 cm
13-16 cm
17-20 cm

Specify the width of the superior vena cava.

**2-3 cm**
5-6 cm
9-12 cm
3-4 cm
17-20 cm

Specify anatomical structure that reside on the left of the superior vena cava:

**The ascending aorta**
The thymus
The mediastinal pleura
The root of the right lung
Phrenic nerve

Specify anatomical structure that reside posterior of the superior vena cava:

**The right pulmonary vein**
The ascending aorta
The mediastinal pleura
The root of the right lung
Phrenic nerve

Specify anatomical structures that reside on the right of the superior vena cava:

**The mediastinal pleura and phrenic nerve**
The left pulmonary vein
The ascending aorta
The root of the right lung
The right pulmonary vein
Specify anatomical structures that reside anterior of the superior vena cava:

The root of the right lung and thymus
The right pulmonary veins
The mediastinal pleura
The ascending aorta
Phrenic nerves

Specify the dural venous sinus, which is origin of the internal jugular vein:

Sigmoid sinus
Transverse sinus
Superior sagittal sinus
Petrous sinuses
Cavernous sinus.

Specify anatomical structure that is not the dural venous sinus.

Superior ophthalmic vein
Transverse sinus
Sigmoid sinus
Superior sagittal sinus
Cavernous sinus

Specify origins of the superior vena cava.

Brachiocephalic veins
Internal jugular veins
Azygos vein and hemiazygos vein
Pulmonary veins
Subclavian veins

Specify chamber of the heart which the superior vena cava flows into.

Right atrium
Left atrium
The right ventricle
The left ventricle
The left auricle

Specify chamber of the heart which the inferior vena cava flows into.

Right atrium
Left atrium
The right ventricle
The left ventricle
The left auricle

Specify tributaries of the superior vena cava.

**Brachiocephalic veins**
- Hemiazygos vein and azygos vein
- Subclavian veins
- Mediastinal veins
- Internal jugular veins

Specify tributaries of the brachiocephalic vein.

**Subclavian veins and internal jugular veins**
- Hemiazygos vein and azygos vein
- Mediastinal veins
- Vertebral veins
- Internal thoracic veins.

Which triangle of the neck is situated internal jugular vein?

**Carotid**
- Omoclavicular
- Submental
- Submandibular
- Omotrapezoid

What are the boundaries of the carotid triangle?

**Posterior belly of digastric, superior belly of omohyoid, sternocleidomastoid**
- Posterior belly of digastric, inferior belly of omohyoid, sternocleidomastoid
- Posterior belly of digastric, sternocleidomastoid
- Anterior belly of digastric, superior belly of omohyoid, sternocleidomastoid
- Anterior belly of digastric, thyrohyoid, sternocleidomastoid

Specify the length of the superior vena cava.

**5-6 cm**
- 3-4 cm
- 9-12 cm
- 13-16 cm
- 17-20 cm

Specify the width of the superior vena cava.

**2-3 cm**
Specify anatomical structure that reside on the left of the superior vena cava:

**The ascending aorta**
The thymus
The mediastinal pleura
The root of the right lung
Phrenic nerve

Specify anatomical structure that reside posterior of the superior vena cava:

**The right pulmonary vein**
The ascending aorta
The mediastinal pleura
The root of the right lung
Phrenic nerve

Specify anatomical structures that reside on the right of the superior vena cava:

**The mediastinal pleura and phrenic nerve**
The left pulmonary vein
The ascending aorta
The root of the right lung
The right pulmonary vein

Specify anatomical structures that reside anterior of the superior vena cava:

**The root of the right lung and thymus**
The right pulmonary veins
The mediastinal pleura
The ascending aorta
Phrenic nerves

A patient with a thymus tumor has cyanosis, extension of subcutaneous venous network, edema of soft tissues of the face, neck, upper half of the body, upper limbs. Which venous trunk is blocked?

**Superior vena cava**
External jugular vein
Subclavian vein
Internal jugular vein
Anterior jugular vein
A patient was admitted to an intensive therapy department with heavy poisoning. To provide infection it is necessary to catheterize the patient and inject medicines into subclavian vein. In what topographical place is it localized?

**Spatium anteriscalenum**
Spatium interscalenum
Spatium retrosternocleidomastoideus
Spatium interaponeuroticum suprasternale
Trigonum ornotrapezoideum

The basilic vein runs along the medial bicipital groove. What muscles restrict the medial bicipital groove?

**M. biceps brachii and m. brachialis from medial side of the arm**
M. biceps brachii and m. brachialis from lateral side of the arm
M. biceps brachii and m. anconeus
M. triceps brachii and m. brachialis
M. biceps brachii and m. coracobrachialis

The cephalic vein runs along the lateral bicipital groove. What muscles restrict the medial bicipital groove?

**M. biceps brachii and m. brachialis from lateral side of the arm**
M. biceps brachii and m. brachialis from medial side of the arm
M. biceps brachii and m. anconeus
M. triceps brachii and m. brachialis
M. biceps brachii and m. coracobrachialis

Specify tributaries of the axillary vein.

**Lateral thoracic vein, subscapular vein, thpraco-epigastric veins**
Cephalic vein, basilica vein, median cubital vein
Ulnar veins, radial veins
Intercostal veins, superior phrenic veins
Pectoral veins, dorsal scapular veins

Specify tributaries of the subclavian vein.

**Pectoral veins, dorsal scapular veins**
Cephalic vein, basilica vein, median cubital vein
Ulnar veins, radial veins
Intercostal veins, superior phrenic veins
Lateral thoracic vein, subscapular vein, thpraco-epigastric veins

Specify the superficial veins of the upper limb.

**Cephalic vein, basilica vein, median cubital vein**
Ulnar veins, radial veins
Intercostal veins, superior phrenic veins
Lateral thoracic vein, subscapular vein, thpraco-epigastric veins
Pectoral veins, dorsal scapular veins

A patient has varicose veins and thrombophlebitis on the posterolateral surface of the leg. Which vein is damaged?

V. saphena parva
V. saphena magna
V. tibialis posterior
V. peronea
V. tibialis anterior

A patient complains of pain and spasms along the posteromedial surface of the shin. Which vein is damaged?

V. saphena magna
V. femoralis
V. epigastrica supraperipheral
V. poplitea
V. saphena parva

Examination of a patient has shown edema on the medial surface of the femur, enlargement of veins, and nodulation. Which vein has pathology?

V. saphena magna
V. saphena parva
V. femoralis
V. poplitea
V. iliaca externa

A patient has vessel dilation on the anteromedial surface of the shin. Which vessel dilation caused this process?

V. saphena magna
A. tibialis anterior
V. saphena parva
A. tibialis posterior
V. poplitea
A patient complains of pain and edema of her lower extremities. Examination has shown edema of tissues, noticeable varicose veins, and nodulation on the medial surface of the thigh. Which vein damage might have caused such changes?

**V. saphena magna**
- V. saphena parva
- V. femoralis
- V. profunda femoris
- Vv. tibiales

A woman appealed to a doctor with complaints of pain and edema of the lower extremity, veins swelling, and varicose nodes formation on the medial surface of the thigh. Which vein is damaged?

**Large saphenous**
- Small saphenous
- Femoral
- Popliteal
- Posterior tibial

A patient complains about edematous legs, skin cyanosis, small ulcers on one side of the lateral condyle. Examination revealed a swelling, enlarged veins, formation of nodes. The pathological process has started in the following vein:

**A. V. saphena magna**
- B. V. saphena magna
- C. V. femoralis
- D. V. profunda femoris
- E. V. iliaca externa

A patient has left-side varicocele. Blood outflow disorder has taken place in:

**V. testicularis sinistra**
- V. testicularis dextra
- V. renalis sinistra
- V. renalis dextra
- V. ovarica

During operation on kidneys, a surgeon must select the renal stalk. What goes out from a kidney gate?

**Renal vein, ureter and lymphatic vessels**
- Renal artery, nerves
- Renal vessels and nerves
- Renal artery and vein
- Renal artery, ureter
The patient was delivered in the hospital with abdominal injuries. At the same time lateral umbilical fold was corrupted. Determine its contents.

**A. et V. epigastrica inferior**
- A. umbilicalis
- A. et V. epigastrica superior
- Urarchus
- A. et V. epigastrica superficialis

The Victim was diagnosed a fracture of the body and the upper branch of the pubic bone, the fragments of damaged blood vessels that pass in the vascular lacuna. Which vessels are damaged?

**A. et V. femoralis**
- A. et V. iliaca interna
- A. et v. iliaca externa
- A. et V. pudenda interna
- A. et V. epigastrica inferior

Specify the length of the inferior vena cava.

**17-20 cm**
- 5-6 cm
- 9- 12 cm
- 13-16 cm
- 3-4 cm

Specify the width of the inferior vena cava.

**2-3 cm**
- 5-6 cm
- 9- 12 cm
- 3-4 cm
- 17-20 cm

Specify the length of the thoracic portion of the inferior vena cava.

**2-3 cm**
- 5-6 cm
- 9- 12 cm
- 13-16 cm
- 17-20 cm

Specify the origin of the inferior vena cava.

**Common iliac veins**
Cephalic vein
Lumbar veins
Lateral thoracic veins
Pectoral veins

Specify the origin of the common iliac vein.

**External and internal iliac veins**
Iliolumbar veins
Lumbar veins
Lateral thoracic veins

Specify chamber of the heart which the inferior vena cava flows into.

**Right atrium**
Left atrium
The right ventricle
The left ventricle
The left auricle

Specify visceral tributaries of the inferior vena cava.

**Hepatic veins, renal vein, right testicular (ovarian) vein, right suprarenal vein**
Hemiazygos vein and azygos vein
Subclavian veins
Lumbar veins, inferior phrenic veins.
Mediastinal veins

Specify parietal tributaries of the inferior vena cava.

**Lumbar veins, inferior phrenic veins**
Hemiazygos vein and azygos vein
Subclavian veins
Mediastinal veins
Hepatic veins, renal vein, right testicular (ovarian) vein, right suprarenal vein

Where does the left testicular vein open?

**Left renal vein**
Hemiazygos vein
Subclavian veins
Lumbar veins
Left suprarenal vein
A patient suffers from liver cirrhosis. The varicose veins of which portacaval shunt are observed?

**V. epigastrica superficialis**
V. femoral is  
V. subcostalis  
V. circumflexa ilium profunda  
Vv. intercostales posteriores

A patient with complaints of pain in the right hypochondrium and bloody vomit was admitted to a hospital. Examination has shown that the patient had enlarged liver, subcutaneous veins of the anterior abdominal wall dilation. In which vessel is blood outflow hindered?

**In the porta**
In the abdominal aorta  
In the hepatic vein  
In the inferior vena cava  
In the superior vena cava

Examination of a patient has shown a tumor of the head of pancreas and disorder of venous outflow from some organs of the abdominal cavity. Which venous vessel was pressed by the tumor?

**Porta**
Renal vein  
Left gastric vein  
Inferior vena cava  
Right gastric vein

A 60-year-old patient has distended, lengthened and tortuous subcutaneous veins of the interior abdominal wall. Circulation of which vein was violated?

**Vena portae**
Vena azygos  
Vena cava superior  
Vena mesenterica superior  
Vena cava inferior

A patient was admitted surgical department in grave condition with a stab wound in the right hypochondrium with signs of internal hemorrhage. After laparotomy, a doctor detected hepatic parenchyma injuries and blood in the abdominal cavity. For a
temporary arrest of bleeding the doctor applied smooth tissue forceps hepatoduodenal ligament. Which vessels are bandaged in the region of this ligament?

**Proper hepatic artery and porta**
- Hepatic veins and hepatic arteries
- Proper hepatic artery and hepatic veins
- Right and left hepatic arteries
- Coeliac trunk and superior mesenteric artery

Examining a 48-year-old patient a doctor detected ascites (peritoneal dropsy), in the site of the umbilicus - dilated plethoric veins (Medusa head symptom). In past history there is alcohol abuse. What organ of the abdominal cavity is affected, and by what venous anastomoses does venous blood outflow?

**Liver. Portacavocaval anastomosis through paraumbilical veins**
- Pancreas. Cavocaval anastomosis through a mesenteric vein
- Spleen. Portacaval anastomosis through the system of gastric veins
- Liver. Portacaval anastomosis through the system of inferior and superior mesenteric and lumbar veins
- Stomach. Portacaval anastomosis through the system of gastric veins, inferior and superior mesenteric veins

A patient was admitted hospital with subcutaneous veins dilation in the area of umbilicus (cirrhosis). The vascular permeability which great venous vessel is damaged?

**V. portae hepatis**
- V. mesenterica superior
- V. mesenterica inferior
- V. iliaca interna
- V. renalis

A 30-year-old patient has a tumor of the ascending colon, which squeezes v. colica dextra interfering venous outflow into the portal system. By which veins is blood derivation into the system of the inferior vena cava possible?

**Vv. lumbales**
- V. renalis dextra
- V. colica sinistra
- V. colica media
- Vv. gastricae

An ambulance delivered a patient with bloody vomit to an admission room. In past history there is liver cirrhosis. Which vein might be damaged in this case?

**Esophageal**
A 54-year-old man was admitted to the hospital with complaints of pain in the right subcostal region, vomiting with blood. Objectively: enlarged liver, varicose veins in the stomach and esophagus. Disfunction of what vessel is likely to be?

**Vena porta**
- Aorta abdominalis
- Vena hepatica
- Vena cava superior
- Vena cava inferior

Which ligament contains the hepatic portal vein?

**Hepatoduodenal**
- Suspensory muscle of duodenum
- Gastrocolic
- Gastrophrenic
- Hepatogastric

Specify the width of the hepatic portal vein.

**1-2 cm**
- 5-6 cm
- 9-12 cm
- 3-4 cm
- 17-20 cm

Specify roots of the portal vein.

**Superior and inferior mesenteric veins, splenic vein**
- Superior rectal vein, the sigmoid veins, left colic vein
- Intestinal veins, right gastro-epiploic vein, pancreaticoduodenal veins
- Hepatic veins
- Short gastric veins, left gastro-epiploic vein

Specify tributaries of the splenic vein.

**Short gastric veins, left gastro-epiploic vein**
- Superior rectal vein, the sigmoid veins, left colic vein
- Intestinal veins, right gastro-epiploic vein, pancreaticoduodenal veins
- Superior and inferior mesenteric veins, splenic vein
- Hepatic veins
Specify tributaries of the superior mesenteric vein.

**Intestinal veins, right gastro-epiploic vein, pancreaticoduodenal veins, ileocolic**
Superior rectal vein, the sigmoid veins, left colic vein
Hepatic veins
Superior and inferior mesenteric veins, splenic vein
Short gastric veins, left gastro-epiploic vein

Specify tributaries of the inferior mesenteric vein.

**Superior rectal vein, the sigmoid veins, left colic vein**
Hepatic veins
Intestinal veins, right gastro-epiploic vein, pancreaticoduodenal veins, ileocolic
Superior and inferior mesenteric veins, splenic vein
Short gastric veins, left gastro-epiploic vein

Specify tributaries of the main trunk of the portal vein.

**Right and left gastric veins, cystic vein, prepyloric vein, para-umbilical veins**
Superior rectal vein, the sigmoid veins, left colic vein
Intestinal veins, right gastro-epiploic vein, pancreaticoduodenal veins, ileocolic
Superior and inferior mesenteric veins, splenic vein
Short gastric veins, left gastro-epiploic vein

Specify the length of the hepatic portal vein.

**4-5 cm**
7-8 cm
9-12 cm
1-2 cm
17-20 cm

Specify organ which the superior mesenteric vein collects the blood.

**Small intestine**
Rectum
Sigmoid
Descending colon
Spleen

Specify organ which the splenic vein drains the blood.

**Spleen**
Rectum
Sigmoid
Descending colon
A patient with a thymus tumor has cyanosis, extension of subcutaneous venous network, edema of soft tissues of the face, neck, upper half of the body, upper limbs. Which venous trunk is blocked?

**Superior vena cava**
- External jugular vein
- Subclavian vein
- Internal jugular vein
- Anterior jugular vein

According to the results of diagnostic tests, a doctor decided to do lymphography of thoracic cavity organs of a 40-year-old patient. The doctor detected that the swelling affected the organ, from lymphoid vessels of which the lymph gets directly into the thoracic duct. Which organ is damaged?

**Esophagus**
- Trachea
- Left principal bronchus
- Heart
- Pericardium

Where should the catheter for evacuation of the lymph from the thoracic lymph duct be inserted?

**To the left venous corner**
- To the right venous corner
- To the superior vena cava
- To the inferior vena cava
- To the left inguinal vein

An 18-year-old youth was admitted to a hospital with the signs of internal bleeding. While playing football he was hit in the left hypochondrium region. Damage of which of the organs, projected into this region, may cause profuse bleeding?

**Spleen**
- Tail of pancreas
- Fundus of stomach
- Left kidney
- Left flexure of colon
Children frequently have nasal breathing affection caused by the overgrowth of the pharyngeal mucous membrane lymphoid tissue. Which tonsils excrescence may cause this?

Pharyngeal
Palatine
Lingual
Tubal
All mentioned

A 10-year-old child complains of nasal breathing affection. Examination has shown that the cause of this is lymphoid tissue hypertrophy. Which tonsil is increased?

Pharyngeal
Palatine
Left tubal tonsil
Lingual
Right tubal tonsil

Some children have mouth breath prevailing because of lymphoid tissue overgrowth. Which structures overgrowth causes this?

Pharyngeal tonsil
Palatine tonsil
Lingual tonsil
Tubal tonsil
Lymph nodes

Mouth breath prevailing of a 7 year-old child is observed. A doctor diagnoses lymphoid tissue overgrowth. Which structures overgrowth causes this?

Pharyngeal and tubal tonsils
Lingual and pharyngeal tonsils
Lymph nodes
Lingual and palatine tonsils
Palatine and pharyngeal tonsils

The examination of the patient revealed hypertrophy and inflammation of the lymphoid tissue, swelling of the mucous membrane of the soft palate between the arches (acute tonsillitis). Which of the tonsils is contained in the norm in this place?

Tonsilla palatina
Tonsilla pharyngealis
Tonsilla lingualis
Tonsilla tubaria
All answers are correct

Where is located palatine tonsil?
**In the tonsillar sinus**
Between the tensor veli palatini and the levator veli palatine
Between the palatoglossal and the tensor veli palatini
Between the palatoglossal and the levator veli palatini
Between the musculus uvulae and palatopharyngeal arches

Where is located the lingual tonsil?
**In the root of tongue**
In the apex of tongue
In the inferior surface of tongue
In the dorsum of tongue
In the tonsil sinus

What structures form the pharyngeal lymphoid ring?
**The palatal, the tubal, pharyngeal and lingual tonsils**
The palatal tonsils
The tubal and the pharyngeal tonsils
The palatal and the tubal tonsils
The pharyngeal and lingual tonsils

A 10-year-old child complains of nasal breathing affection. Examination has shown that the cause of this is lymphoid tissue hypertrophy. Which tonsil is increased?
**Pharyngeal**
Palatine
Lingual
Left tubal tonsil
Right tubal tonsil

Where are located the tubal tonsils?
**Between the opening of auditory tube and soft palate**
In the vault of pharynx
In the inferior surface of pharynx
In the laryngopharynx
In the tonsil sinus

Where is located the pharyngeal tonsil?
**In the vault of pharynx**
Between the opening of auditory tube and soft palate
In the inferior surface of pharynx
In the laryngopharynx
In the tonsil sinus

Where should the catheter for evacuation of the lymph from the thoracic lymph duct be inserted?

**To the left venous corner**
To the right venous corner
To the superior vena cava
To the inferior vena cava
To the left inguinal vein

While palpating mammary gland of a patient a doctor revealed an induration in form of a node in the inferior medial quadrant. Metastases may extend to the following lymph nodes:

**Parasternal**
Posterior mediastinal
Profound lateral cervical
Bronchopulmonary
Superior diaphragmal

Specify primary lymphoid organs.

**Red bone marrow, thymus**
Lymph nodes
Tonsils
Yellow bone marrow
Spleen, tonsils, lymphoid nodules, lymph nodes

Specify secondary lymphoid organs.

**Spleen, tonsils, lymphoid nodules, lymph nodes**
Thymus
Yellow bone marrow
Rectum
Red bone marrow

Specify localization of the red bone marrow.

**Epiphysis of long bones**
Metaphysis of long bones
Diaphysis of long bones
Periosteum
Endosteum
Where should the catheter for evacuation of the lymph from the thoracic lymph duct be inserted?
To the left venous corner
To the right venous corner
To the superior vena cava
To the inferior vena cava
To the left inguinal vein

While palpating mammary gland of a patient a doctor revealed an induration in form of a node in the inferior medial quadrant. Metastases may extend to the following lymph nodes:
**Parasternal**
Posterior mediastinal
Profound lateral cervical
Bronchopulmonary
Superior diaphragmal

Specify the roots of the right lymphatic duct.
**Right bronchomediastinal, jugular and subclavian trunks**
Lumbar trunks, intestinal trunks
Right bronchomediastinal trunks
Subclavian trunks
Jugular trunks

Where does the right lymphatic duct open?
**Right venous angle**
Left venous angle
External jugular vein
Anterior jugular vein
Axillary vein

Specify the roots of the thoracic duct.
**Lumbar trunks, intestinal trunks**
Right bronchomediastinal, jugular and subclavian trunks
Right bronchomediastinal trunks
Subclavian trunks
Jugular trunks

Where does the thoracic duct open?
Left venous angle
Right venous angle
External jugular vein
Anterior jugular vein
Axillary vein

Specify veins that form venous angle.
Internal jugular and subclavian veins
Internal thoracic and vertebral veins
External jugular vein and subclavian veins
Anterior jugular vein and subclavian veins
Axillary vein and subclavian veins

Specify the length of the right lymphatic duct.
**10-15 cm**
7-8 cm
4-5 cm
1-2 cm
30-40 cm

Specify the length of the thoracic duct.
**30-40 cm**
7-8 cm
10-15 cm
1-2 cm
4-5 cm

According to the results of diagnostic tests, a doctor decided to do lymphography of thoracic cavity organs of a 40-year-old patient. The doctor detected that the swelling affected the organ, from lymphoid vessels of which the lymph gets directly into the thoracic duct. Which organ is damaged?
Esophagus
Trachea
Left principal bronchus
Heart
Pericardium
Specify lymph nodes that are not the nodes of the head.

**Supraclavicular**
- Mastoid nodes
- Submental nodes
- Submandibular nodes
- Occipital nodes

Which triangle of the neck contains the submandibular nodes?

**Submandibular**
- Omoclavicular
- Submental
- Omotrapezoid
- Carotid

What are the boundaries of the submandibular triangle?

**Mandible, two belies of digastrics**
- Posterior belly of digastric, inferior belly of omohyoid, sternocleidomastoid
- Posterior belly of digastric, sternocleidomastoid
- Posterior belly of digastric, superior belly of omohyoid, mandible
- Anterior belly of digastric, sternocleidomastoid

Which triangle of the neck the submental nodes occupies?

**Submental**
- Omoclavicular
- Omotrapezoid
- Lingual
- Carotid

What are the boundaries of the submental triangle?

**Anterior bellies of digastric, mandible**
- Posterior belly of digastric, inferior belly of omohyoid, sternocleidomastoid
- Posterior belly of digastric, sternocleidomastoid
- Posterior belly of digastric, superior belly of omohyoid, sternocleidomastoid
- Anterior belly of digastric, thyrohyoid, sternocleidomastoid

The patient complaining of prolonged pain in the area of the frontal teeth of the mandible asked the dentist to examine him. On examination, the doctor found carious cavity in the lower right incisor. It was observed in an increasing of the size of lymph nodes. Which lymph nodes drains the lower incisors?

**Submandibular nodes**
- Mastoid nodes
- Submental nodes
Occipital nodes
Supraclavicular

The patient complaining of prolonged pain in the area of the frontal teeth of the mandible asked the dentist to examine him. On examination, the doctor found carious cavity in the lower right canine. It was observed in an increasing of the size of lymph nodes. Which lymph nodes drains the lower canines?

**Submandibular nodes**
Mastoid nodes
Submental nodes
Occipital nodes
Supraclavicular

The patient with periodontitis of the second lower molar appealed to the doctor. The examination has shown that the inflammation spread to the lymph nodes. What lymph nodes are involved in the inflammatory process?

**Submandibular nodes**
Mastoid nodes
Submental nodes
Occipital nodes
Supraclavicular

The patient complaining of prolonged pain in the area of the frontal teeth of the upper jaw asked the dentist to examine him. On examination, the doctor found carious cavity in the upper right incisor. It was observed in an increasing of the size of lymph nodes. Which lymph nodes drains the lower incisors?

**Submental nodes**
Mastoid nodes
Occipital node
Submandibular nodes
Supraclavicular

The patient complaining of prolonged pain in the area of the frontal teeth of the maxilla asked the dentist to examine him. On examination, the doctor found carious cavity in the upper right canine. It was observed in an increasing of the size of lymph nodes. Which lymph nodes drains the lower canines?

**Submental nodes**
Mastoid nodes
Occipital nodes
Submandibular nodes
Supraclavicular
A 58-year-old patient is admitted to a cardiological clinic with acute persistent pain in substernal area, which does not reduce after the second taking of nitroglycerine. Electrocardiogram shows that he has big necrosis of the posterior surface of the heart. The diagnosis is transmural myocardial infarction of the posterior wall of the heart. Acute occlusion of which vessel led to this disease?

**Right coronary artery**
- Coronary sinus
- Right pulmonary artery.
- Left coronary artery
- Left common carotid artery

A patient has an infarction the anterior wall of the left ventricle. Blood circulation of which vessel is damaged?

**Anterior interventricular branch the left coronary artery**
- Atrioventricular branches of the right coronary artery
- Circumflex branch of the left coronary artery
- Posterior interventricular branch of the right coronary artery
- Left marginal branch of the left coronary artery

Examining a patient ischemic disease a doctor detected deterioration of venous blood flow in the one of a cardiac vein, which passes through the anterior interventricular sulcus. Which vein is this?

**V. cordis magna**
- V. cordis media
- V. cordis parva
- V. posterior ventriculi sinistri
- V. obliqua atrii sinistri

During the period of prenatal development in the vascular system of a fetus an arterial duct functions, which turns into lig. arteriosum after birth. What vessels does it join?

**Pulmonary trunk and aorta**
- Right and left atrium
- Aorta and inferior vena cava
- Pulmonary trunk and superior vena cava
- Aorta and superior vena cava
A 56-year-old patient has worked for 28 years at a chemical plant in a workshop with harmful productions conditions. He often has hemorrhages of the nasal cavity mucosa. Which arteries involved?

**Anterior and posterior ethmoidal**
- Supraorbital
- Ciliary
- Anterior cerebral
- Ophthalmic

An 18-year-old man was admitted to a hospital after a car accident. In the traumathology center numerous traumas of soft tissues of the face in the region of the medial angle of eye accompanied by profuse bleeding were detected. What arterial anastomosis is formed in this region?

**A. carotis externa et a. carotis interna.**
- A. carotis externa et a. subclavia.
- A. carotis interna et a. subclavia.
- A. subclavia et a. ophthalmica.
- A. carotis interna et a. ophthalmica.

A 80 year-old patient had hemorrhage of the brain and was taken to the hospital. The place of hemorrhage was revealed on the lateral hemispheres surfaces during the medical examination. What artery was injured?

**The middle cerebral artery**
- The anterior cerebral artery
- The posterior cerebral artery
- The anterior communicating artery
- The posterior communicating artery

After the injury of temporal region, a patient got epidural hematoma. Which artery is damaged?

**Middle meningeal**
- Deep temporal
- Deep auriculary
- Superior tympanic
- Inferior tympanic

A patient was admitted to a hospital with an open fracture of the ramus mandible and profuse bleeding in the fracture site. Which artery is damaged?

**A. alveolaris inferior**
- A. temporalis media
- A. facialis
A. lingualis
A. palatina ascendens

A surgeon, accessing the organs of the thoracic cavity, made an incision on the anterior chest wall along one of the intercostal spaces. He carefully dissected the tissues of the anterior medial region of the intercostal space in order not to damage the artery situated in parallel to the edge of the breastbone, by 1-1.5 cm more lateral from it. Which artery is meant?

**Internal thoracic**
- Anterior intercostal
- Superior phrenic
- Costocervical trunk
- Inferior phrenic

A doctor examined a patient who got into a car accident. The patient has a fracture of the left clavicle and disorders of blood circulation in the extremity (radial artery pulsation is absent). What is the cause of blood circulation disorder?

**Compression of subclavian artery**
- Compression of axillary artery
- Compression of subclavian vein
- Compression of vertebral artery
- Compression of axillary vein

During an operative intervention on a mammary gland profuse bleeding appeared. Which artery was damaged?

**Lateral thoracic**
- Internal thoracic
- Superior epigastric
- Axillary
- Superior thoracic

After trauma, a 44-year-old patient had a rupture of left palm muscle tendons and of the surface of blood vessels. After operation and removal of the most part of the necrotically changed muscle tissue the bloodstream was normalized. What vessels have helped with restoration of bloodstream?

**Arcus palmaris profundus**
- Arcus palmaris superficialis
- Aa. digitales palmareae communes
- Aa. metacarpeae palmareae
- Aa. Perforantes
While performing an operation in the area of axillary crease a surgeon has to define an arterial vessel surrounded by fascicles of brachial plexus. What artery is it?

**A. axillaris**
- A. vertebralis
- A. transversa colli
- A. profunda brachii
- A. subscapularis

A woman underwent an operation because of extrauterine (tubal) pregnancy. In course of the operation the surgeon should ligate the branches of the following arteries:

- **Uterine and ovarian**
  - Superior cystic and ovarian
  - Inferior cystic and ovarian
  - Uterine and superior cystic
  - Uterine and inferior cystic

A 29-year-old woman was admitted to a gynecology department with complaints of pain in the abdominal region. An ovary tumor was clinically detected and prescribed to be removed. During the operation, a ligament containing the ovarian vessels and nerves must be dissected. Which ligament is it?

**Lig. suspensorium ovarii**
- Lig. latum uteri
- Lig. cardinale
- Lig. umbilicalis lateralis
- Lig. ovarii proprium

A 40-year-old woman had appendectomy, during which an artery of the vermiform process was ligated. This artery separates from:

**Iliocolic artery**
- Jejunal artery
- Left colic artery
- Right colic artery
- Middle colic artery

Examination of a patient has shown pancreas blood supply disorder. Which artery could be damaged?

**A. lienalis**
- A. hepatica propria
- A. gastrica sinistra
- A. gastroepiploica dextra
- A. gastrica dextra
A patient was admitted to the surgical department in grave condition with a stab wound in the right hypochondrium with signs of internal hemorrhage. After laparotomy, a doctor detected hepatic parenchyma injuries and blood in the abdominal cavity. For a temporary arrest of bleeding, the doctor applied smooth tissue forceps hepatoduodenal ligament. Which vessels are bandaged in the region of this ligament?

**Proper hepatic artery and porta**
- Hepatic veins and hepatic arteries
- Proper hepatic artery and hepatic veins
- Right and left hepatic arteries
- Coeliac trunk and superior mesenteric artery

A patient with a stomach ulcer situated in the pyloric region on the lesser curvature of stomach has bleeding. What vessel should be ligated to stop the bleeding?

**Right gastric artery**
- Left gastric artery
- Left gastroomental artery
- Hepatic artery
- Right gastroomental artery

A. 65 years old patient has been diagnosed with bleeding in the anterior horn of the spinal cord. Which, by the function are anterior horns?
- Motion
- Sensitive
- Sympathetic
- Parasympathetic
- Mixed

A. 41 years old patient got into an infectious department of the hospital with a high body temperature. Meningeal symptoms objectively expressed. A lumbar puncture was done. What anatomical formation was punctured?
- spatium subarachnoideum
- spatium subdurale
- spatium epidurale
- cavum trigeminale
- cisterna cerebellomedullaris posterior

The patient with fractures of the thoracic spine (Th1) with spinal cord injury has arrived to the surgical department. Which segment of the spinal cord is injured?
2 thoracic
1 thoracic
1 lumbar
5 lumbar
5 sacral

For the purpose of differential diagnosis of meningitis a study of cerebrospinal fluid is conducted. In what place the lumbar puncture is safe?
- L III - L IV
- L II - L III
- L I - L II
- Th XII - L I
- L V - S I

The patient complaints of pain in the lumbar region. The doctor reveals tenderness in the paravertebral points and diagnoses "lumbar radicular pain." Where most likely happened compression of spinal roots?
- In the intervertebral apertures lumbar spine.
- In nutritional apertures of the lumbar vertebrae
- In the spinal canal.
- In the apertures in the transverse processes of the cervical vertebrae.
- In the structures of in the brain substance in lumbar segments of the spinal cord.

To define the topography of the spinal cord:
- CI - L II
- CI - L 5
- CII - L 4
- CI - L II
- CII - L I

In case of injury cervical spine segments of the spinal cord are damaged. Specify this number:
- 4
- 8
- 5
- 6
- 7

In case of injury spine thoracic segments of the spinal cord are damaged. Specify this number:
- 12
- 8
- 5
- 10
- 11
In case of injury spine lumbar segments of the spinal cord are damaged. Specify this number:
5
4
6
7
8

In case of injury spine sacral segments of the spinal cord are damaged. Specify this number:
5
4
6
7
8

The spinal cord was damaged in the area of thickening. Specify them:
intumescentia cervicalis, intumescentia lumbosacralis
intumescentia lumbosacralis, intumescentia thoracica
intumescentia lumbosacralis, intumescentia lumbalis
intumescentia cervicalis, intumescentia lumbalis
intumescentia cervicalis, intumescentia sacralis

A. 65 years old patient has been diagnosed damaged anterior roots of the spinal cord. What is the composition of its fibers?
Motional and vegetative
Sensitive
Motional and sensitive
Parasympathetic
Sensitive and vegetative

A. 65 years old patient has been diagnosed damaged posterior roots of the spinal cord. What is the composition of its fibers?
Sensitive
Motional and vegetative
Motional and sensitive
Parasympathetic
Sensitive and vegetative

Point the number of the spinal cord segments:
31
25
29
30
36

The spinal cord has the following surfaces:
arterior, posterior, lateral
arterior, posterior
arterior, lateral
posterior, superior, lateral
superior, interior, lateral

The spinal cord has the following surfaces:
arterior, posterior, belly-band
arterior, posterior
arterior, belly-band
posterior, superior, belly-band
superior, interior, belly-band

The patient has injurie of the spine in the lumbar spine with damage to the posterior roots of the spinal cord. What violations are found in the patient during the examination?
Sensitive
Motional and vegetative
Motional and sensitive
Parasympathetic
Sensitive and vegetative

In neurological diseases violations are associated with the structural and functional unit of the central nervous system. Name it:
neuron
nephron
neuroglia
Betz cells
acinus

A 40 years old patient got into an infectious department of the hospital with a high body temperature. Meningeal symptoms objectively expressed. A lumbar puncture was done. What anatomical formation was punctured?
Spatium subarachnoideum.
Spatium epidurale.
Spatium subdurale.
Cavum trigeminale.
Cisterna cerebellomedullaris posterior.

A 68 years old patient got into an infectious department of the hospital with meningeal symptoms after a tick bite. To confirm the diagnosis the lumbar puncture was made between III-IV lumbar vertebrae. What anatomical education will puncture needle before the liquor appears?
Cutis, subcutaneous fat, lig. flavum, spatium epiduralis, dura mater, spatium subdurale, arachnoidea spinalis, spatium subarachnoideum.
Cutis, subcutaneous fat, dura mater spinalis, pia mater spinalis, spatium subarachnoidale.
A 30 years old patient has been arrived in the neurosurgical department with stab wounds in the area of low thoracic spine. During the examination was found that the knife blade passed between the procesus spinosus of 10th and 11th thoracic vertebrae and damaged posterior spinal cord. The fibers of which pathways have been damaged in this case?

- fasciculus gracilis and fasciculus cuneatus
- fasciculus cuneatus
- fasciculus gracilis
- spino cerebellaris dorsalis
- spino cerebellaris ventralis

A. skier dosen’t have knee-jerk after after spinal cord injury. Which segments of the spinal cord were injured?

- 2-4 lumbar segments of the spinal cord
- 1-2 cervical segments of the spinal cord
- 8-9 thoracic spinal cord segments
- 10-11 thoracic spinal cord segments
- 5-6 cervical segments of the spinal cord

A patient has lost tactile sensitivity, body position sense and vibrations sense. Which pathways were damaged?

- fasciculus cuneatus et gracilis
- tractus reticulospinalis
- tractus spino cerebellares lateralis et ventralis
- tractus rubrospinalis
- tractus tectospinalis

A 65 years old patient has been diagnosed with bleeding in the anterior horn of the spinal cord. Which, by the function are anterior horns?

- Motional
- Sensitive
- Sympathetic
- Parasympathetic
- Mixed
A patient has meningitis. The puncture of the arachnoid area was proposed. Determine shells between which it is located:
- Arachnoid and pia mater
- The periosteum and arachnoid membrane
- The solid and the arachnoid membranes
- The periosteum and dura mater
- The dura mater pia mater

A patient has severe headache, stiffness in the neck muscles, repeated vomiting, pain on skull percussion, increased sensitivity to light stimuli. Diagnosis is meningitis. Lumbar puncture was shown. Point the location of the puncture:
- Between 3 and 4 lumbar vertebrae
- Between 1 and 2 lumbar vertebrae
- Between 12 thoracic and 1 lumbar vertebrae
- Between 5 lumbar and sacrum foundation
- Between 11 and 12 thoracic vertebrae

In order to different diagnosis of meningitis a research of cerebrospinal fluid is conducting. Where lumbar puncture is safe?
- L III - L IV
- LV - S I
- L II - L III
- L I – L II
- Th XII - L I

A 41 years old patient got into an infectious department of the hospital with a high body temperature. Meningeal symptoms objectively expressed. A lumbar puncture was done. What anatomical formation was punctured?
- spatium subarachnoideum
- spatium subdurale
- spatium epidurale
- cavum trigeminale
- cisterna cerebellomedullaris posterior

A car accident victim was got with injury of the rear pillars of the spinal cord. Which infringement of the functions should appear due to this injury?
- Loss of vibration sensitivity
- The loss of pain sensitivity
- Loss of the ability to voluntary movements of limbs
- The loss of temperature sensitivity
- Raising tone of skeletal muscles

A patient had been taken to hospital with spinal injuries. Discovered injury of rear ropes of the spinal cord at the 1st thoracic vertebra. Which pathways were affected in this case?
- Tactile and proprioceptive sensitivity
- Spina cerebellar
Cortical-spinal
Pain and temperature sensitivity
Extrapyramidal

A patient has lost tactile sensitivity, body position sense and vibrations sense. Which pathways were damaged?
- semita reticulospinalis
- spinocerebellaris ventralis and spinocerebellaris dorsalis
- tractus rubrospinalis
- fasciculus gracilis and fasciculus cuneatus
- tractus testospinalis

The patient after spinal cord injury occurred loss of deep sensitivity and movement in the right lower limb. Which part of the spinal cord was injured?
- In the structures of the dexter half of of the spinal cord.
- In the structures of the anterior half of the spinal cord.
- In the structures of the posterior half of of the spinal cord.
- In the structures of the sinister half of of the spinal cord.
- complete transverse rupture of the spinal cord.

The 36-year-old patient was diagnosed as having limbs paralysis case on the right part of the body, the loss of pain and temperature sensitivity on the left, partially reduce tactile sensitivity on both sides. Which brain part is injured?
- right half of the spinal cord
- anterior column of gray matter of the spinal cord
- posterior column of gray matter of the spinal cord
- motor cortex
- left half of the spinal cord

As a result of spinal trauma the left half of the body of the patient feels no pain and is not temperature sensitive. Damage of which pathways may be the cause of this phenomenon?
- Tr. spino-thalamicus lateralis dexter.
- Tr. spino-thalamicus anterior dexter.
- Tr. spino-thalamicus lateralis sinister.
- Tr. spino-thalamicus anterior sinister.
- Fasciculus gracilis et fasciculus cuneatus sinister

Examining patients with injured muscle-joint feeling it was found that the pathological process is localized at the white matter of the spinal cord. Where are normal ways of cortical proprioceptive sensitivity direction?
- In posterior funiculus of spinal cord.
- In anterior funiculus of spinal cord.
- In lateral funiculus of spinal cord.
- In area near the central funiculus of spinal cord.
- In lateral funiculus of spinal cord.

Point the limits of the lateral horn of the spinal cord:
CVIII -LII
LV - S I
L II - L III
CII – L II
Th XII - L I

Patient was diagnosed with damaged lateral horn of the spinal cord. Which nucleus was injured?
- nucleus intermediolateralis
- nucleus thoracicus
- nucleus proprius
- scattered cells
- gelatinous substance

Patient was diagnosed with damaged anterior column spinal cord. Which nucleus was injured?
- nucleus centromedianus
- nucleus thoracicus
- nucleus proprius
- nucleus intermediolateralis
- scattered cells

Patient was diagnosed with damaged dorsicolumn spinal cord. Which nucleus was injured?
- nucleus thoracicus
- nucleus proprius
- nucleus intermediolateralis
- scattered cells
- nucleus centromedianus

As a result of spinal trauma the patient has no appropriate proprioceptive sensitivity. Which pathway is injured?
- Fasciculus gracilis et fasciculus cuneatus sinister
- Tr. spino-thalamicus anterior dexter.
- Tr. spino-thalamicus lateralis sinister
- Tr. spino-thalamicua lateralis dexter.
- Tr. spino-thalamicus anterior sinister

Point which surfaces does the medulla oblongata have:
- Lateralis, anterior, posterior
- Lateralis, anterior
- Medialis, anterior.
- Medialis, latelaris
Medialis, posterior

Patient has been diagnosed with damaged roots that run from posterolateral sulcus of the medulla oblongata. Point them:
- IX, X, XI pairs of cranial nerves.
- I, II, III pairs of cranial nerves.
- IV, V, VI pairs of cranial nerves.
- VII, VIII, IX pairs of cranial nerves.
- III, VI, X pairs of cranial nerves.

From the medulla oblongata, namely the nucleus cuneatus et nucleus gracilis starts:
- tractus bulbo-thalamicus
- tractus spinothalamicus anterior
- tractus spinothalamicus posterior
- tractus corticospinalis
- tractus corticonuclearis

Patient has a damage of the pathways that starts from the pontis, namely from the auditory nuclei vestibulocochlear nerve. Name it:
- lateral loop
- medial loop
- tractus corticopontocerebellaris
- tractus spinothalamicus anterior
- tractus bulbo-thalamicus

The pontis connects to the cerebellum through:
- medialis peduncle of cerebellum.
- superior peduncle of cerebellum.
- inferior peduncle of cerebellum.

Through all peduncles
There is no right answer

A 58 years-old woman addressed to the doctor with complaints on violations of the tongue taste sensitivity. An examination using MRI has found a small hemorrhage in the area of the medulla oblongata. The damage of which the nuclei of the medulla oblongata could result in a violation of taste?
- nucleus tracti solitarii
- nucleus ambiguus
- nucleus nervi hypoglossi
- nucleus salivatorius inferior
- dorsalis nuclei cochleares
60-years-old woman addressed to the doctor with complaints on the difficulties of movements of the tongue that interferes the abilities to speak and eat. Examination of brain using IRAs showed that the patient has a small hemorrhage in the lower part of medulla oblongata. Which the nuclei of the medulla oblongata are damaged?

- nuclei nervi hypoglossi.
- nuclei salivatorius inferior
- nuclei nervi accessorii
- nuclei ambiguus
- nuclei tracti solitarii

After stroke (bleeding) in the brain stem the patient has disorders in respiratory and cardiovascular activity. In which brain structure is localized pathological process?

- In nuclei dorsalis nervi vagi
- in the ventral part of the pons
- In nuclei of formatio reticularis of medulla oblongata
- In nuclei of formatio reticularis of the pons.
- In nucleus ambiguus of medulla oblongata

The patient has a bleeding in the back of the medulla oblongata. The patient complains on respiratory disorders. Which nuclei are damaged?

- Nuclei – respiration centers
- nuclei nervus glossopharyngeus
- nuclei nervi accessorii
- nuclei nervi hypoglossi
- Nuclei - centers of the cardiovascular system.

During the examination of the patient using IRAs in the brain in the area of the pons doctor saw the tumor, which held its ventral part. What anatomical structure divides the pons into dorsal and ventral parts?

- fibrosi corpus trapezoideum
- nuclei nervus trigeminus
- nuclei nervus abducens
- nuclei nervus facialis
- nuclei corpus trapezoideum.

The patient arrived to the clinic with damaged skull base in the slope area. Intensive therapy was appointed to prevent extensive swelling and compression of the brain, where are situated respiratory and vasomotor centers. Point their location:

- in myelencephalon
- in mesencephalon
- in pons
- in cerebellum.
- in the whole brain stem

When examining patients with disorders of auditory function was found that
the pathological process is localized at the lemniscus lateralis formation. At the level of which brain it is normally formed?
- metencephalon (pons).
- cervical.
- thoracic.
- medulla oblongata.
- Mesencephalon

In the neurosurgical department was brought the patient in a coma (disturbance of consciousness and lack of purposeful reactions to any stimulus). When examining doctor found that dysfunction of cerebral cortex caused by the patient's lesion of the brainstem neuronal network, which supported the activity of the cerebral cortex. Which of the brain structures are injured?
- formatio reticularis
- nuclei basales
- nuclei of cerebellum.
- nuclei caudatis
- nuclei of hypothalamus.

A the pyramid of the medulla oblongata is damaged by the tumor. In which of the pathways the nerve impulses would be violated?
- Tr. corticospinalis.
- Tr. corticopontinus.
- Tr. corticonuclearis.
- Tr. dentatorubralis.
- Tr. spinocerebellaris.

At postmortem brain research it is necessary to determine the boundary between the medulla oblongata and the spinal cord. What is the benchmark that separates these parts of the central nervous system?
- radix of the first pair of the spinal nerves.
- radix glossopharyngeus
- radix nervi accessorii
- radix nervi hypoglossi
- Nuclei - centers of the cardiovascular system.

It is known that the posterior peduncles of the spinal cord, continuing in the medulla oblongata, transition to the cerebellum form thickening. Due to what they are forming?
- tuberculum gracilis et cuneatus
- nucleus thoracicus
- nucleus proprius
- латеральне та медіальне проміжне ядро
- scattered cells
At postmortem brain research it is necessary to determine the boundary between the medulla oblongata and the pons. What is the benchmark that separates these parts of the central nervous system?
- radix nervi abducens
- radix glossopharyngeus
- radix nervi accessorii
- radix nervi hypoglossi
- radix of the first pair of the spinal nerves.

At postmortem brain research it is necessary to determine the boundary between the medulla oblongata and the pons from the dorsal side. What is the benchmark that separates these parts of the central nervous system?
- Brain strips
- radix glossopharyngeus
- radix nervi accessorii
- radix nervi hypoglossi
- radix of the first pair of the spinal nerves.

A patient was diagnosed with bulbar disorders. Which part of the brain was damaged?
- myelencephalon.
- cervical
- thoracical
- diencephalon
- mesencephalon

The patient has lesions of sensitive cranial nerve nuclei, located in the medulla oblongata. Point the nuclei:
- nucleus tracti solitarii
- nucleus ambiguus
- nucleus nervi hypoglossi
- Nucleus salivatorius inferior
- nucleus dorsalis nervi vagi

The patient has a tumor in site of connection with the cerebellum and medulla oblongata. It is:
- pedunculi cerebellares inferiores
- pedunculi cerebellares superiores
- pedunculi cerebellares medii
Leaflets of the cerebellum.
cerebellar vermis

A patient has a tumor in site of connection with the cerebellum and pontis. It is:

- pedunculi cerebellares medii
- pedunculi cerebellares superiores
- pedunculi cerebellares inferiores

Leaflets of the cerebellum.
cerebellar vermis

A patient has a tumor in site of connection with the cerebellum and average brain. It is:

- pedunculi cerebellares superiores
- pedunculi cerebellares inferiores
- pedunculi cerebellares medii

Leaflets of the cerebellum.
cerebellar vermis

The cerebellum is connected with other parts of the central nervous system by:

3 pairs of peduncles
5 peduncles
2 peduncles
3 peduncles
4 peduncles

A patient was diagnosed with a damage of superior cerebellar peduncles, superior medullary velum and trigone of lateral lemniscus. These formations belong to:

- isthmus rhombencephali
- medulla oblongata
- pons
- The spinal cord
- the midbrain

Cerebellar tumor has spread to all layers of the cerebellar cortex. It consists of:

3 stratum of nerve cells
2 stratum of nerve cells
1 stratum of nerve cells
only of nerve processes

During the work man gets tired quickly. In a standing position with closed eyes he staggers, loses balance. Tonus of skeletal muscle is low. Which of the following brain structures is affected?

- cerebellum
- the pons
- nucleus of accessory nerve
nucleus of the vagus nerve
medulla oblongata

During the examination of woman’s brain bleeding was found, that is localized in the superior cerebellar peduncle. Which ways cross it?
- anterior spinocerebellar tract, tractus tectospinalis
- posterior and anterior spinocerebellar tract, olivocerebellar tract
- posterior spinocerebellar tract, olivocerebellar tract, vestibulocerebellar tract, lateral vestibulospinal tract
- anterior spinocerebellar tract, olivocerebellar tract, vestibulocerebellar tract, lateral vestibulospinal tract.
- pontocerebellaris tract.

During the examination of woman’s brain bleeding was found, that is localized in the medial cerebellar peduncle. Which ways cross it?
- pontocerebellaris tract.
- posterior and anterior spinocerebellar tract, olivocerebellar tract
- posterior spinocerebellar tract, olivocerebellar tract, vestibulocerebellar tract, lateral vestibulospinal tract.
- anterior spinocerebellar tract, olivocerebellar tract, vestibulocerebellar tract, lateral vestibulospinal tract.
- anterior spinocerebellar tract, tractus tectospinalis.

During the examination of woman’s brain bleeding was found, that is localized in the inferior cerebellar peduncle. Which ways cross it?
- posterior spinocerebellar tract, olivocerebellar tract, vestibulocerebellar tract, lateral vestibulospinal tract.
- posterior and anterior spinocerebellar tract, olivocerebellar tract
- anterior spinocerebellar tract, olivocerebellar tract, vestibulocerebellar tract, lateral vestibulospinal tract.
- pontocerebellaris tract.
- anterior spinocerebellar tract, tractus tectospinalis.

Patient find a violation of movements in the form of disorders the coordination, difficulty in keeping balance while standing and walking. About damage of which formation do these symptoms show?
- destruction of the cerebellum and its tracts
- destruction of cerebral cortex in the area of anterior central gyrus
- destruction of the spinal cord’s motor nuclei
- destruction of the spinal cord’s anterior funiculus of the white matter
- destruction of the midbrain’s red nucleus

Due to poisoning by an unknown toxic chemicals patient has a loss of body balance because of cerebellar ataxia. Which of the nuclei of the cerebellum is affected in this case?
- fastigial nucleus.
- dentate nucleus
interposed nucleus
globose nucleus
all

The patient '50 was hospitalized with closed craniocerebral trauma in the area of the occipital bone. When viewed, gait disorder and balance, tremors of hands. What part of the brain is damaged?
cerebellum
the spinal cord
medulla oblongata
the pons
diencephalon

When examining a patient diagnosed destruction hindbrain. Which department CNS suffered destruction?
cerebellum
the spinal cord
medulla oblongata
the pons
diencephalon

A patient has been diagnosed with a tumor of an ancient cerebellum. Determine its location:
nodulus and flocculus
cerebellar Cortex
cerebellar vermis and nodulus
flocculus
nodulus

A patient has been diagnosed with a tumor of an old cerebellum. Determine its location:
cerebellar vermis
cerebellar Cortex
cerebellar vermis and nodulus
flocculus
nodulus and flocculus

A patient has been diagnosed with a tumor of an old cerebellum. Determine its location:
cerebellar Cortex
cerebellar vermis et nodulus
flocculus
nodulus and flocculus
nodulus
At postmortem study was conducted sagittal cut of worm cerebellum, where they found the original location of the gray and white matter. Point its name:

A. cerebellar Cortex
   arbor vitae
   acinus
   folium flocculus
   nodulus

A patient has movement disorders in the form of coordination disorders, difficulty in keeping balance while standing and walking. Which formations of the central nervous system were injured?
   the cerebellum and its pathways.
   the cerebral cortex in the anterior central gyrus.
   the motor nuclei of the spinal cord.
   the front ropes white matter of the spinal cord.
   red midbrain nuclei.

In the clinic of nervous diseases was taken the patient with a hemorrhage in the upper legs of the cerebellum. Which ways were damaged?
   tr. spinocerebellaris anterior
   tr. spinocerebellaris posterior
   tr. olivocerebellaris
   tr. corticospinalis
   tr. Spinothalamicus

Bleeding in the facial area tubercle rhomboid fossa was found during examination of a woman after her brain injury. Nuclei of which pairs of cranial nerves are projected in this part of the rhomboid fossa?
   The nuclei of the VI pair of cranial nerves
   The nuclei of I, II pairs of cranial nerves
   The nuclei of the III pair of cranial nerves
   The nuclei of IV, V, VI pairs of cranial nerves
   The nuclei of the IX pair of cranial nerves

On the examination of a woman who had a brain injury the bleeding in the area of the triangle vagus nerve rhomboid fossa was found. Nuclei of which pairs of cranial nerves are projected in this part of the rhomboid fossa?
   The nuclei of the X pair of cranial nerves
   The nuclei of I, II pairs of cranial nerves
   The nuclei of the III, IV, V pair of cranial nerves
   The nuclei of IV, V, VI pairs of cranial nerves
The nuclei of the VII pair of cranial nerves

On the examination of a man who had a brain injury the violation of the integrity of brain structures that limit the diamond-shaped hole that shape it from both sides above was found. Which structures of the brain are damaged?

- Superior medullary velum
- The lower legs of the cerebellum
- The upper legs of the cerebellum
- Inferior medullary velum

The patient initiated cerebral outflow of CSF from the cavity of IV ventricular. By which formation does the IV ventricular connects with spatia subarachnoidea encephali et medullae spinalis

- Mid-opening
- Side corner
- upper hole
- catches
- Inferior rictus

On the examination of a man who had a brain injury the foreign body in the area of the triangle hypoglossal nerve was detected. In this triangle such nuclei projected:

- The nuclei of the IV, V, VI pairs of cranial nerves
- The nuclei of I, II pairs of cranial nerves
- The nuclei of the III, IV, V pairs of cranial nerves
- The nuclei of the VII pair of cranial nerves
- The nuclei of the X pair of cranial nerves

In the formation of the walls of the fourth ventricle the Superior medullary velum takes part. It is stretched between:

- crura superioris cerebelli
- cruribus cerebellum
- Mediocris posterior pedes.
- Folia cerebellum.
- Cerebelli vermis et exiguo.

At postmortem brain research is necessary to determine the measure between Medulla oblongata and pons on the dorsal side

- Ingenium nudaveris
- The roots of language-pharyngeal nerves.
- Roots additional nerves.
- Hypoglossal nerve roots.
- I par nervorum spinalium radices.

In the lower triangle of rhomboid fossa is projected:

- The nuclei IX, X, XI, XII pairs of cranial nerves
- The nuclei I, II, III pairs of cranial nerves
The nuclei III, IV, V pairs of cranial nerves
The nuclei IV, V, VI pairs of cranial nerves
The nuclei VI, VII, VIII pairs of cranial nerves

In the lower triangle of rhomboid fossa is projected:
The nuclei V, VI, VII, VIII pairs of cranial nerves
The nuclei I, II, III pairs of cranial nerves
The nuclei III, IV, V pairs of cranial nerves
The nuclei IV, V, VI pairs of cranial nerves
The nuclei IX, X, XI, XII pairs of cranial nerves

Rhomboid fossa is divided into the left and right triangles:
Median furrow
Front of the median slit
Retro-olivary groove
Preolivary groove
Cerebral stripes

Rhomboid fossa is divided into the upper and lower triangle:
Cerebral stripes
Posterior median sulcus
Front of the median slit
Retro-olivary groove
Preolivary groove

IV ventricle is the residue of the cavity of:
Diamond-shaped vesicles
Anterior cerebral vesicles
Posterior cerebral vesicles
Middle cerebral vesicles
All of the above listed brain vesicles

If the liquor ways at the median and lateral apertures of the IV ventricle are locked, an occlusive syndrome develops. Which cavity is complicated by the flow of liquor, while this disease happens?
Subarachnoid space
Lateral ventricle
The third ventricle
The fourth ventricle
Cerebral aqueduct

An examination of the patient by MRI revealed a tumor that is localized in the tegmentum pontis. Specify nuclei of which pairs of cranial nerves are located in this part?
Nuclei V, VI, VII, VIII pairs of cranial nerves
Nuclei I, II, III pairs of cranial nerves
Nuclei III, IV, V pairs of cranial nerves
Nuclei IV, V, VI pairs of cranial nerves
Nuclei IX, X, XI, XII pairs of cranial nerves

A 40-years-old man because of head trauma got violated hearing and there was paresis of facial muscles. The doctor set a diagnosis with hematoma of pontis-cerebellar angle. The roots of which cranial nerves run from the brain in this corner?

- VII, VIII pairs of cranial nerves
- I, II, III pairs of cranial nerves
- III, IV, V pairs of cranial nerves
- IV, V, VI pairs of cranial nerves
- IX, X, XI, XII pairs of cranial nerves

The patient is hardly swallowing food. Objectively: tongue motionless observed defects speech. The cause of these disorders may be damage to the core, which is designed in the bottom of the fossa rhomboid. The nuclei of which nerve is damaged?

- Nuclei XII pairs of cranial nerves
- Nuclei III pairs of cranial nerves
- Nuclei V pairs of cranial nerves
- Nuclei VI pairs of cranial nerves
- Nuclei VIII pairs of cranial nerves

The patient after a long illness revealed damage of efferent fibers that depart from the accessory nerve nuclei in the brain stem. Point the nuclei:

- nucleus ambiguus, nucleus accessorius
- nucleus tracti solitarii, nucleus accessorius
- nucleus nervi hypoglossi, nucleus ambiguus
- nucleus salivatorius inferior, nucleus ambiguus
- nucleus dorsalis nervi vagi, nucleus accessorius

As a result of the pathological process of autonomic dysfunction nucleus of the vagus nerve. The patient complains on bradycardia, reduced intestinal motility. Which nucleus is affected?

- nucleus dorsalis nervi vagi
- nucleus tracti solitarii
- nucleus ambiguus
- nucleus nervi hypoglossi
- nucleus salivatorius inferior

The patient after arachnoiditis has got increased pressure of cerebrospinal fluid in the 4th ventricle of the brain. Fusion of which opening led to this?

- Foramen madialis et lateralis.
- Foramen interventriculare sinistram
- Foramen interventriculare dextram
- Cerebral aqueduct
- canalis centralis.
Nuclei of which pairs of cranial nerves are projected on the front hump of rhomboid fossa?
- Nucleus n. abducentis
- Nucleus motorius n. trigemini
- Nucleus ambiguus
- Nucleus impar
- Nucleus n. facialis

During the appendectomy anesthesiologist noticed the patient has no pupillary reflex as a result of an overdose of anaesthetic. Which structure of the brainstem involved in the process?
- Midbrain
- Cerebrum
- Interim brain
- Medulla oblongata
- Rear brain

To the neurosurgical department was admitted a patient in a coma (disturbance of consciousness and lack of purposeful reactions to any stimuli). When examining doctor found that dysfunction of the cerebral cortex was caused by the brainstem neuronal network, which supported the activity of the cerebral cortex. What impressed brain structure?
- Reticular formation
- Basal nucleus
- The nuclei of the cerebellum
- Caudate nucleus
- The nuclei of the hypothalamus

As a result of a damage of a.cerebri posteriores often a so-called red nucleus syndrome occurs - paralysis of the oculomotor nerve on the side of the pathological source, trembling limbs on the opposite side. What part of the brain is affected?
- Mesencephalon
- Thalamus
- Metathalamus
- Epithalamus
- Hypothalamus

The patient with an ophthalmoplegic form of botulism occurs a midbrain lesions, clinical manifestations of which are diplopia, paralysis of accommodation, ptosis, expansion and deformation of the pupils, the absence of reaction of pupils to
light. Damage of which midbrain nuclei leads to such clinical symptoms?
Nuclei oculomotor nerve, vagus
Superior colliculi
Inferior colliculi
Red nucleus.
Substantia nigra

The patient has a midbrain tumor associated with violation of embryonic development. Out of what vesicle does a midbrain develop?
3rd.
1st.
2nd.
4th.
5th

As a result of hemorrhage damage to brain structures is observed that relate to the midbrain. Which of these structures in NOT located in the midbrain?
subcortical center of smell.
subcortical center of hearing.
subcortical center of vision.
pathways linking the cortex of the forebrain to the spinal cord.
nuclei of the oculomotor nerves.

Patient has a disorder in a liquor flow at the midbrain. What are the cavities of the midbrain?
Aqueduct.
IV ventricle.
III ventricle.
lateral ventricle.
Central Canal.

After an infection a patient is left with a damaged midbrain nuclei. Which of the structures in located outside of the midbrain?
Nucl. tracti mesencephalici n. trigemini.
Nucl. n. oculomotorii.
Nucl. accessorius.
Nucl. n. trochlearis.

The patient has a violation of the reflex reaction to sudden visual stimuli. Subcortical centers of vision of the midbrain laid down in:
Colliculi superiores.
Corpus geniculatum laterale.
Brachium colliculi inferiores.
Brachium colliculi superiores.
Colliculi inferiores.

Reflex center for various movements that have arisen under the influence of
visual and auditory stimuli are:
inferior colliculi and superior colliculi of the tectum
Red nucleus.
Substantia nigra.
The nuclei of the cranial nerves.
Reticular formation.

Patient has a damaged route which links the tectum of the midbrain with the medulla and spinal cord. Where do they cross over?
On the tectum of the midbrain.
Basis of the crus cerebri
Tectum of the crus cerebri
Central gray matter.
Substantia nigra.

A patient has an injured trastus rubrospinalis dexter. This structure connects the red nuclei with:
The front horns of the spinal cord on the opposite side.
anterior horns of the spinal cord on the same side.
rear horns of the spinal cord on the same side.
rear horns of the spinal cord on the opposite side.
lateral horns of the spinal cord on the opposite side.

The patient has violations of the extrapyramidal system. Through the trastus rubrospinalis cerebellum and extrapyramidal system affects the:
automatic movements of skeletal muscles.
reduce muscle layer viscera.
conscious movement of skeletal muscles.
perception of tactile stimuli.
secretory activity of digestive glands.

When hemorrhage of the middle cerebral artery damaged portion of the intermediate brain that lies between the hills of the upper roof of the midbrain. It:
Pineal gland.
Pituitary.
The hypothalamus.
Thalamus.
Geniculate body.

The patient at the local lesions of the brain stem, nucleus are affected in the medium longitudinal beam. In this case relations between the nuclei of oculomotor nerves are violated. Which nucleus is damaged?
Basal nucleus.
Nuclei cerebellum.
nucleus fasciculus longitudinalis medialis.
Subthalamic Nucleus
Nuclei Meynert

By neurosurgical department patient hospitalized in a coma (impaired consciousness and lack of purposeful reactions to any stimuli). When examining doctor found that dysfunction of cerebral cortex lesion caused by the patient's brainstem neuronal network, which supported the activity of the cerebral cortex. What brain structures are affected?
- Reticular formation.
- Basal nucleus.
- Nuclei cerebellum.
- Caudate nucleus.
- Nuclei the hypothalamus.

A patient with the local lesions of the brain stem has violated pathways in the brain peduncles. Which of the pathways forms decussatio tegmenti ventralis?
- tr. rubrospinalis
- tr. spinocerebellaris
- tr. tectospinalis
- tr. corticospinalis
- tr. Spinothalamicus

A patient with the local lesions of the brain stem has violated pathways in the brain peduncles. Which of the pathways forms decussatio tegmenti dorsalis?
- tr. tectospinalis
- tr. spinocerebellaris
- tr. rubrospinalis
- tr. corticospinalis
- tr. Spinothalamicus

Patient has damaged cells, which are located around the Sylvian aqueduct and regulate autonomic functions. What part of the midbrain affected?
- central gray matter
- Interpeduncular fossa
- transparent partition
- Epithalamus.
- nuclei of the third pair cranial nerves.

The patient was diagnosed with Parkinsonism as a result of damage substances that divides the brain stem at the base to cover. Point this matter:
- substancia nigra.
- nuclei ruber.
The nuclei of the cranial nerves.
- colliculi superiores et inferiores.
- formatio reticularis.
Patient notes the loss of all kinds of sensitivity (surface and deep) on one side of the body, forced laughter and crying, upset autonomic functions. Which part of brain is injured?
- Diencephalon
- Mesencephalon.
- Pons.
- Medulla oblongata.
- Telencephalon.

A 3 years old boy has a premature puberty. Which part of brain is injured?
- Diencephalon
- Mesencephalon.
- Pons.
- Medulla oblongata.
- Telencephalon.

The patient during the examination of the brain using MRI revealed markedly dilated lateral and third ventricles. The doctor diagnosed blockade of cerebrospinal fluid pathways. Point the level of occlusion:
- Cerebral aqueduct
- Interventricular hole
- Median aperture of the fourth ventricle
- Lateral aperture of the fourth ventricle
- Granulationes arachnoidae

A patient with a damaged cord intermediate breach hearing. What are the core while damaged?
- Medial geniculate body
- Lateral geniculate body
- Nucleus ruber
- Anterior nucleus of the hypothalamus
- Posterior ventral nucleus

A 50 years old patient was diagnosed with a brain tumor in the visual area of the hypothalamus. There is an elevated levels of vasopressin in the blood of patient. Which nucleus of the hypothalamus produces this hormone?
- Nucl. supraopticus
- Nucl. preopticus
- Nucl. paraventricularis
- Nucl. corporis mamillaris
The patient hypothalamic-pituitary syndrome (Babinsky-Fröhlich), fat deposits in the shoulder belt, breasts, loss of secondary sexual characteristics, susceptibility to hypothermia. Which department applies to the hypothalamus of the brain?

Diencephalon
Mesencephalon.
Pons.
Medulla oblongata.
Telencephalon.

A patient was diagnosed with malignant exophthalmos caused by excessive secretion of pituitary thyroid stimulating hormone. Which department diencephalon does pituitary belong to?

Hypothalamus
Mesencephalon
Thalamus
Metathalamus
Epithalamus

The patient was diagnosed with bulimia -- increased hunger. Has been detected the injure of the hypothalamic receptor site that signals to the brain about accumulation of carbohydrates in the blood. What brain is affected?

Diencephalon
Medulla oblongata
Mesencephalon
Pons.
Medulla oblongata

Because of injury a.cerebri posteriores observed symptoms of nuclei oculomotor nerve (Parinaud's Syndrome). What wall of the III ventricle forms comissura cerebri posterior?

Posterior
Inferior
Superior
Anterior
Lateralis

The patient in '50 revealed thalamic syndrome, symptoms of which are an intense pain of the half of the body, "thalamic hand", hyperkinetic disorder. Sometimes these manifestations are joined with smell disorder, violent laughter, and crying. What part of the brain is functionally damaged?

Thalamus
Metathalamus
Epithalamus
Hypothalamus
Mesencephalon
The child had the flu for 3 weeks, there are violation of thermoregulation as long subfebrilitetu and hyperthermia crises. The doctor suspects a functional deficiency of higher vegetative center. What part of the of the brain is functionally damaged?

- Hypothalamus
- Thalamus
- Metathalamus
- Epithalamus
- Mesencephalon

The patient after heavy electrical traums in rehabilitation period has got autonomic disorders in the form of violation of thermoregulation and sweating, headache, lability of the vascular wall. Which brain is the highest vegetative center?

- Hypothalamus
- Thalamus
- Metathalamus
- Epithalamus
- Mesencephalon

The patient has been diagnosed with malignant exophthalmos caused by excessive secretion of pituitary thyroid stimulating hormone. Which department diencephalon does the pituitary belong to?

- Hypothalamus
- Mesencephalon
- Thalamus
- Metathalamus
- Epithalamus

The patient in '50 revealed thalamic syndrome, symptoms of which are intense pain half of the body, a kind of hand position ("thalamic hand") - forearm bent, wrist bent, fingers straighten and constantly shaking. Defeat of which thalamic nuclei are the cause peculiar position of the upper limb?

- medial
- lateral dorsal back
- lateral ventral intermediate
- lateral ventral anterior
- Central

The patient hydrocephalus - hydrops of the brain. On MRI recorded the third ventricle enlargement. Occlusion of the circulation of cerebral spinal fluid was held at plumbing brain. On which side of the third ventricle of the brain is located cerebral aqueduct?

- Posterior
- Inferior
- Superior
- Anterior
- Lateralis
Male, 50, diagnosed - Sjogren's syndrome ("dry syndrome"). The patient has an insufficiency of exocrine gland - lack of tearing (keratitis), salivation, atrophy xerodermia through sweat and sebaceous glands, arthritis. The cause of the disease is not clear. Non-pathology of the hypothalamus. Which way of the central nervous system connects the hypothalamus with vegetative nuclei of the brain stem and spinal cord?

- fasciculus longitudinalis dorsalis.
- fasciculus longitudinalis anteriores.
- Tractus thalamo-corticalis.
- Tractus thalamo-spinalis.
- Tractus mamillo-thalamicus.

The patient had a pituitary adenoma that caused the of damage of the optic path. Which department diencephalon applies the affected area?

- Hypothalamus
- Thalamus
- Metathalamus
- Epithalamus
- Mesencephalon

A 12 years old boy has a premature puberty. What structure of an intermediate brain produces a hormone that inhibits puberty?

- Epithalamus
- Hypothalamus
- Metathalamus
- Mesencephalon

Patient has an attack of drowsiness, even while walking. The examination revealed a tumor in the third ventricle area of the posterior wall. How does the posterior wall is formed?

- Commisura cerebri posterior, commisura habenularum
- Hypothalamus, commisura cerebri posterior
- Thalamus
- Metathalamus
- Epithalamus

In case of myocardial posterior cerebral artery, the posterior hypothalamic area of the nucleus centrummedianum, tractus dentatothalamic-rubronuclearis are damaged. Which pathways start from this site?

- fasciculus longitudinalis dorsalis.
- fasciculus longitudinalis anteriores.
- Tractus thalamo-corticalis.
- Tractus thalamo-spinalis.
- Tractus mamillo-thalamicus.
The physician-pathologist conducted the autopsy of 85-year-old man who died after prolonged cerebrovascular accident. In studying of the man’s brain a physician determined the presence of hemorrhage in the area of the cortex, located between the calcarine fissure and parietal-occipital sulcus (BNA). What is the name of this part of cortex?

- the cuneus
- The uncus
- The precuneus
- Limbic system
- paracentral lobule

A Lecturer of anatomy during the lesson was showing students the cerebral hemisphere and explained the relief structure of the cortex. One of the students asked the name of part of the cortex, located between the marginal share of the cingulate sulcus and parietal-occipital sulcus. ). What is the name of this part of cortex?

- The precuneus
- The insula
- the cuneus
- Limbic system
- The uncus

During the brains studying physician determined the presence a hemorrhage in the area of the cortex, located between the upper and lower frontal sulci (sulcus). What is the name of this part of cortex?

- Middle frontal gyrus
- The uncus
- The precuneus
- Superior frontal gyrus
- Inferior frontal gyrus

During the studying of brains physician determined the presence a hemorrhage in the area of the cortex, located below the lower frontal sulcus (sulci). What is the name of this part of cortex?

- Inferior frontal gyrus
- The uncus
- The precuneus
- Superior frontal gyrus
- Middle frontal gyrus
During the studying of brains physician determined the presence a hemorrhage in the area of the cortex, located fetched and occipital-temporal sulci. What is the name of this part of cortex?
- Medial occipitotemporal gyrus
- The uncus
- The precuneus
- Superior frontal gyrus
- Inferior frontal gyrus

A Lecturer of anatomy during the lesson was showing students the cerebral hemisphere and explained the relief structure of the cortex. One of the students asked him to name the part of the cortex, located between the marginal share of the cingulate sulcus and parietal-occipital sulcus. What is the name of this part of cortex?
- The precuneus
- The insula
- the cuneus
- D.Limbic system
- The uncus

A Lecturer of anatomy during the lesson was showing students the cerebral hemisphere and explained the relief structure of the cortex. One of the students asked him to name the part of the cortex, located between the zonality sulcus and sulcus of the corpus callosum. What is the name of this part of cortex?
- The cingulate gyrus
- The insula
- the cuneus
- The precuneus
- The uncus

A Lecturer of anatomy during the lesson was showing students the cerebral hemisphere and explained the relief structure of the cortex. One of the students asked him to name the part of the cortex, located between the calcarine sulcus and parietal-occipital sulcus. What is the name of this part of cortex?
- the cuneus
- The insula
- The precuneus
- Limbic system
- The uncus

A Lecturer of anatomy during the lesson was showing students the cerebral hemisphere and explained the relief structure of the cortex. One of the students asked him to name the part of the cortex, which covers the back end of the superior temporal gyrus. What is the name of this part of cortex?
- The angular gyrus
- The insula
- the cuneus
- The cingulate gyrus
The uncus

In explaining the relief structure of the cerebral cortex of one of the students asked to name the part of the cortex, which is located between the central postcentral gyrus. What is the name of this part of cortex?
the postcentral gyrus
the cuneus
The precuneus
The cingulate gyrus
The uncus

After a patient got trauma a part of the cortex, located in-depth of lateral sulcus was damaged. What is the name of this part of cortex?
insular lobe
the cuneus
frontal lobe
temporal lobe
The uncus

After a patient got trauma a part of the cortex, located between the central and parietal-occipital sulci was damaged. What is the name of this part of cortex?
occipital lobe
insular lobe
the cuneus
frontal lobe
temporal lobe

After a patient got trauma a part of the cortex, located under the lateral sulcus was damaged. What is the name of this part of cortex?
temporal lobe
insular lobe
the cuneus
frontal lobe
The uncus

After a patient got trauma a part of the cortex, located behind the parietal-occipital sulcus was damaged. What is the name of this part of cortex?
insular lobe
the cuneus
frontal lobe
temporal lobe
parietal lobe

In studying of the brain a doctor determined the presence of tumor in the cortex sulcus which separates insular lobe. What is the name of this part of cortex?
circular sulcus of insula.
Sphenoidal sulcus of insula
The precuneus
cingulate gyrus
The uncus

In studying of the brain a doctor determined the presence of hemorrhage in the part of cortex which is above the cingulate gyrus in the frontal lobe. What is the name of this part of cortex?
circular sulcus of insula
The medial frontal gyrus
Superior frontal gyrus
The cingulate gyrus
The uncus

The doctor found out the pathological process in the area of the cortex, located at the lowmedial edge of temporal lobe and laterally limited with the olfactory sulcus. What is the name of this gyrus?
Parahippocampal gyrus
The medial frontal gyrus
Superior frontal gyrus
The cingulate gyrus
Inferior frontal gyrus

In studying of the brain a doctor determined the presence of hemorrhage in the part of cortex located along the top edge of the hemisphere and limited below the upper frontal sulcus. What is the name of this part of cortex?
Superior frontal gyrus
Parahippocampal gyrus
The medial frontal gyrus
The cingulate gyrus
Inferior frontal gyrus

In studying of the brain a doctor determined the presence of hemorrhage in the part of the lower frontal gyrus, located between the front and the ascending branch of lateral sulcus. What is the name of this part of cortex?
Triangular part
Parahippocampal gyrus
The precuneus
Orbital part
Opercular part

After suffering a hemorrhagic stroke the patient ceased to understand oral speech. Where is pathological focus localized?
posterior superior temporal gyrus.
Medial surface of the superior temporal gyrus.
posterior middle frontal gyrus.
The upper parietal lobe.
posterior inferior of the frontal gyrus.