Institute of Anatomy, First Faculty of Medicine, Charles University

List of questions for a credit with mark from Clinical Topographic Anatomy

Questions include description of topographic regions, their borders, orientation in them, palpable structures, blood vessels, lymph nodes, and innervation with subsequent demonstrations of dissected structures.

Each student draws a combination of two questions from this list.

HEAD

Temporal, frontal, orbital, and oral region.

Parotideomasseteric and buccal region.

Deep regions of the face - retromandibular fossa, infratemporal fossa.

Orbit – borders, content, blow-out fracture of the orbit.

Nose, nasal cavity, and paranasal sinuses.

Oral cavity.

Scalp – layers, blood supply, innervation.

Anatomical background for nerve blocks in stomatology.

Neonatal skull- fontanelles, brain vessels, and venous sinuses.

Cranial meninges; spaces between them, meningeal aa., CSF.

NECK

Anterior cervical region: tracheotomy, and cricothyrotomy (emergency laryngotomy).

Submandibular triangle, and carotid triangle.

Scalenovertebral triangle, scalene fissure, its relationship to pleural cupula, pneumothorax.

Lateral cervical region, subclavian vein, internal jugular vein and subclavian vein puncture.

Parapharyngeal space, spreading of infection into the mediastinum.

Larynx and trachea, laryngospasm.

Thyroid and parathyroid gland; goitre and adenoma of the parathyroid gland.

Neck dissection (*en bloc* resection).

THORAX

Thoracic wall, pleural cavity puncture and drainage.

Breast – lymphatic drainage + sentinel lymph node.

Pleura, projections onto thoracic wall, pneumothorax.

Lungs, bronchial tree.

Mediastinum.

Heart, areas of auscultation.

Vasculature of the heart, PTCA, bypass, innervation.

Pericardium and pericardiocentesis.

Conducting system of the heart.

Diaphragm, congenital diaphragmatic hernias.

Vertebral canal, spinal meninges, vertebro-medullar topography.

ABDOMEN

Projection of abdominal organs onto abdominal wall.

Abdominal wall - layers, blood supply, innervation; areas of weakening, rectus sheath.

Inguinal and femoral hernia.

Abdominal cavity and peritoneum.

Position, syntopy of the stomach; its blood supply and lymphatic drainage.

Position, syntopy of the liver and biliary tree; segments of the liver.

Position, syntopy of the pancreas and duodenum.

Position, syntopy of the spleen.

Appendix: projections, positions.

Retroperitoneum.

Great vessels of the abdominal cavity – branches of the abdominal aorta, inferior vena cava.

Portocaval (portosystemic) anastomosis, oesophageal varices.

PELVIS

Bony pelvis, external measurements, fractures.

Pelvic planes and their dimensions.

Pelvic floor muscles in relation to childbirth; head rotation during birthing.

Uterine tubes and ovaries; tubal torsion and extrauterine pregnancy.

Female endopelvic fascias, ligaments supporting the uterus, uterine prolapse.

Nerve blocks of the perineum (pudendal and ilioinguinal).

Mechanisms of urinary continence.

Peritoneum and the female pelvis.

Peritoneum and the male pelvis; torsion of the testis, cryptorchidism, varicocele, hydrocele.

Syntopy of the prostate and its palpation; bladder catheterization in the male, two major complications in radical prostatectomy.

Syntopy of the rectum, per rectum examination.

Blood supply of the pelvic viscera.

Perineum and episiotomy.

UPPER LIMB (UL)

Main arteries of the UL from the clinical perspective - positions, palpations, pressure points, potential collateral circulation in the UL.

Superficial and deep veins of UL. Anatomical basis of venepuncture or catheterization in the UL.

Sensory innervation of UL according to peripheral nerves and spinal nerve roots.

Brachial plexus, main peripheral nerves and symptoms of their injury including the potential sites of their damage.

Axilla, walls, and contents from the clinical standpoint (shoulder luxation and fractures of the proximal end of the humerus, potential nerve damage).

The shoulder joint and possible damage of its structures (shoulder luxation, rotator cuff and its rupture, impingement syndrome).

Vessels and nerves of the cubital region. The elbow joint from the clinical perspective (tennis elbow, golfer's elbow, sites of potential nerve damage).

Carpal region, position of vessels, nerves, tendons.

Carpal tunnel syndrome, synovial sheaths of the hand and their potential damage.

Muscles and tendons of the hand and their potential injuries.

Osteofascial spaces, flexors and extensors of the arm.

Osteofascial spaces and muscular groups of the forearm from clinical perspective (compartment syndrome, tunnel syndromes).

LOWER LIMB (LL)

Main arteries of the LL from the clinical perspective - positions, palpations, pressure points, collateral circulation of the LL, ischemic leg disease.

Superficial and deep veins of the LL. Perforators. Varices, saphenous vein harvesting.

Sensory innervation of the LL according to peripheral nerves and spinal nerve roots.

Lumbar plexus, main peripheral nerves originating from it and symptoms of their injury.

Sacral plexus, main peripheral nerves originating from it and symptoms of their injury, potential sites of their damage.

Iliopectineal fossa, lacuna vasorum, lacuna musculorum (vascular and muscular space); inguinal lymph nodes and their tributaries, cannulation of the femoral artery.

Gluteal region, suprapiriform and infrapiriform foramen. i.m. injections.

Popliteal fossa, adductor hiatus (Hunter´s canal).

Osteofascial spaces and muscular groups of the thigh.

Osteofascial spaces and muscular groups of the leg from the clinical perspective (compartment syndrome, Achille's tendon).

Muscles of the foot (by the group, functions).

Hip joint and potential injuries of its components (range of movements, DDH, fractures of the proximal end of the femur, femoral head avascular necrosis).

Knee joint and potential injuries to its components (ligaments, menisci).

Ankle (talocrural) joint and potential injuries to its components.

Transverse and longitudinal arches of foot.