

Group A: Locomotion system (bones, joints, muscles) and Topography – blue**Bones****1. General structure and growth of a bone**

- Main points: types of bones, parts of bones, histological structure, types of bone marrow, types of ossification, vascular supply of bones
- Pictures: internal structure of bones, parts of bones

2. Bones of limbs

- Main points: bones of girdles, bones of the free part of extremities, important osseous structures, their function
- Pictures: scheme of the carpal and tarsal bones

3. Skull

- Main points: demonstration of bones, openings, osseous structures and cranial fossas on the skull, their content and function
- Pictures: content of jugular foramen

4. Skull of newborn and temporomandibular joint

- Main points: relation between neurocranium and viscerocranium, fonticuli and other characteristic marks, connections of bones, ossification; temporomandibular joint (type, shape, head, cup, articular capsule, ligaments, other structures and movement), muscles providing movement in TM joint, topography of the TM joint
- Pictures: superior and lateral view to the newborn skull, detail of the TM joint

5. Vertebral column, sternum and ribs

- Main points: common marks of the vertebrae, differences between cervical, thoracic and lumbar vertebrae, sacral bone, movements of the vertebral column, articulations of the vertebral column, vertebral canal and its content, intercostal space and its content, scalenic fissure
- Pictures: general structure of the vertebrae, ligaments of the vertebral column

Joints and corresponding regions**6. General structure of a joint**

- Main points: types of connection of the bones, general description of the joint, types of joints, other accessory joint structures
- Pictures: schematic cross-section of the joint

7. Joints of pectoral girdle

- Main points: examples of the joints and their division
- Pictures: cross-section of the sternoclavicular joint

8. Shoulder joint and axilla

- Main points: type, shape, head, cup, articular capsule, ligaments, other joint structures, movements, middle position, muscles providing movement of the joint, topography of the joint; rotator cuff; borders and content of the axilla
- Pictures: ligaments of the shoulder joint, content of the axilla

9. Elbow joint and cubital fossa

- Main points: type, shape, head, cup, articular capsule, ligaments, other joint structures, movements, middle position, muscles providing movement of the joint, topography of the joint; borders and content of the cubital region and cubital fossa
- Pictures: ligaments and joint capsule of the elbow joint, content of cubital fossa

10. Joints and topographical sites of hand

- Main points: types, shapes, heads, cups, articular capsules, ligaments, other joint structures, movements, middle positions, muscles providing movement of the joints, topography of the joints; description of the wrist joint and carpometacarpal joint of the thumb, borders and content of the hand region and carpal canal
- Pictures: scheme of the joints of the hand, cross-section of the carpal canal

11. Pelvis as a whole

- Main points: bones forming pelvis, types of connections, greater and lesser pelvis, planes and diameters of the pelvis, pelvic content
- Pictures: connections of the pelvis, planes and diameters

12. Hip and sacroiliac joint

- Main points: type, shape, head, cup, articular capsule, ligaments, other joint structures, movements, middle position, muscles providing movement of the joints, topography of the joints
- Pictures: ligaments and joint capsule of the hip joint

13. Knee joint and popliteal fossa

- Main points: type, shape, head, cup, articular capsule, ligaments, other joint structures, movements, middle position, muscles providing movement of the joint, topography of the joint; borders and content of the popliteal fossa, canalis adductorius
- Pictures: ligaments and other structures of the knee joint (lateral and superior view), content of the popliteal fossa

14. Ankle joint, joints of foot, foot arch and topographical sites of foot

- Main points: types, shapes, heads, cups, articular capsule, ligaments, other joint structures, movements, middle position, muscles providing movement of the joints, topography of the joints; description of the talocrural, Chopart's and Lisfranc's joints; arches of the foot, ligaments and muscles maintaining it

- Pictures: ligaments and joint gap of the talocrural joint (posterior view, frontal cross-section), scheme of the joints of the foot, foot arches

15. Joints of vertebral column and thorax

- Main points: connections of the vertebral column, types, shapes, heads, cups, ligaments, movements, muscles providing movement of the joint, topography of the joint
- Pictures: ligaments of the vertebral column, connection between skull and vertebral column

Muscles

16. General structure and innervation of a muscle

- Main points: types of muscles, structure of the skeletal muscle, parts and auxiliary structures of the muscle, types of contractions and fibres, innervation (nerve fibres and receptors) of the muscle
- Pictures: structure of the muscle, sarcomere, innervation of the muscle

17. Masticatory and facial muscles, fasciae of head

- Main points: embryonal origin of the mimic and masticatory muscles, overview of the mimic muscles and their functions, modiolus anguli oris, origin, insertion, innervation and function of the masticatory muscles and buccinator muscle, fasciae of the head
- Pictures: scheme of the mimic muscles

18. Muscles and fasciae of neck

- Main points: muscle groups, origin, insertion, innervation and function of the muscles, neck fascia and its layers, spaces of the neck (parapharyngeal, prestyloid, retrostyloid, retropharyngeal and visceral spaces), scalenic fissure
- Pictures: neck muscles (anterior view), transversal cross-section of the neck (C6), scalenic fissure

19. Muscles and fasciae of thorax

- Main points: muscle groups, origin, insertion, innervation and function of the muscles, fasciae, description of respiration, inspiratory and expiratory muscles, explanation of pneumothorax, fasciae of the thorax
- Pictures: thoracic muscles (anterior view), cross-section of the thoracic wall, intercostal space

20. Diaphragm and mechanism of breathing

- Main points: embryonal origin of the diaphragm, origin, insertion, innervation, function and topography of diaphragm, openings and their content, description of respiration, inspiratory and expiratory muscles, explanation of pneumothorax
- Pictures: parts and openings of the diaphragm

21. Muscles and fasciae of abdomen

- Main points: origin, insertion, innervation and function of the muscles, layers of the abdominal wall, rectus sheet, fasciae, borders and content of the inguinal canal, abdominal hernias
- Pictures: transversal cross-section of the abdominal wall through rectus sheet above and below umbilicus, inguinal canal

22. Pelvic and urogenital floors and their fasciae, ischioanal fossa

- Main points: origin, insertion, innervation and functions of the muscles of the pelvic and urogenital floors, borders and content of the ischioanal fossa, pudendal canal
- Pictures: inferior view to the pelvic floor and urogenital floor, frontal cross-section of the lesser pelvis

23. Muscles, fasciae, regions and topographic sites of back

- Main points: muscle groups, origin, insertion, innervation and function of superficial muscles; systems and names of deep back muscles, development, innervation and function; borders and content of the suboccipital, superior lumbar and inferior lumbar triangles
- Pictures: posterior view to the muscles of the back, suboccipital triangle

24. Muscles, fasciae, regions and topographic sites of pectoral girdle

- Main points: muscle groups, origin, insertion, innervation and function, vessels and nerves around shoulder, fasciae; axillary fossa, scapular notch, spinoglenoidal notch, humerotricipital and omotricipital foramens, deltoideopectoral triangle
- Pictures: posterior view to the scapular muscles

25. Muscles, fasciae, regions and topographic sites of arm

- Main points: muscle groups, origin, insertion, innervation and function, compartments of the arm, vessels and nerves of the brachial region, fasciae; cubital fossa, cubital canal, supinatory canal, pronatory canal
- Pictures: cross-section of the arm

26. Muscles, fasciae, regions and topographic sites of forearm

- Main points: muscle groups, origin, insertion, innervation and function, compartments of the forearm, vessels and nerves of the antebrachial region, fasciae; carpal canal, ulnar canal, Paron's space
- Pictures: cross-section of the forearm

27. Muscles, fasciae, regions and topographic sites of hand

- Main points: muscle groups, origin, insertion, innervation and function, compartments of the hand, synovial vaginae of the palm and back of the hand, fasciae; Giot's space, radial foveola
- Pictures: cross-section of the hand, synovial vaginae

28. Muscles, fasciae, regions and topographic sites of pelvic girdle

- Main points: muscle groups, origin, insertion, innervation and function, vessels and nerves of the hip and gluteal regions, fasciae; greater and lesser sciatic foramina, lacuna vasorum + musculorum
- Pictures: posterior view to the pelvic muscles

29. Muscles, fasciae, regions and topographic sites of thigh

- Main points: muscle groups, origin, insertion, innervation and function, compartments of the thigh, vessels and nerves of the femoral region, fasciae; lacuna vasorum + musculorum, iliopectineal fossa, femoral triangle, adductor canal
- Pictures: cross-section of the thigh, femoral triangle

30. Muscles, fasciae, regions and topographic sites of leg

- Main points: muscle groups, origin, insertion, innervation and function, compartments of the leg, vessels and nerves of the crural region, fasciae; popliteal fossa, arcus tendineus musculi solei, malleolar, fibular and musculofibular canals
- Pictures: cross-section of the leg, structures behind medial and lateral malleolus

31. Muscles, fasciae, regions and topographic sites of foot

- Main points: muscle groups, origin, insertion, innervation and function, compartments, vessels and nerves of the foot region, fasciae; malleolar canal
- Pictures: cross-section of the foot

Topography**32. Scalp and cranial vault, frontal and occipital regions**

- Main points: layers of the scalp, vessels and nerves of the frontal and occipital region
- Pictures: cross-section of the layers of the scalp

33. Orbit and nasal cavity

- Main points: borders and content, passages and their content, relations to the surrounding structures
- Pictures: frontal cross-section of the nasal cavity (conchae and meatuses), direction of oculomotor muscle contractions

34. Face, infratemporal and pterygopalatine fossae

- Main points: vessels and nerves of the face, from superficial to deeper layers; borders, passages and content of the infratemporal and pterygopalatine fossae, relations to the surrounding structures
- Pictures: vessels and nerves of the face

35. Regions, triangles and spaces of neck

- Main points: division, borders and content of the regions, triangles and spaces of the neck (submental, submandibular, carotic, muscular, omoclavicular, omotrapezoid, Pirogov's triangles, Beclard's angle)
- Pictures: cross-section of the neck at the level of the C6, overview of the cervical triangles

36. Inguinal canal, abdominal wall and herniae

- Main points: borders and content of the inguinal canal, hernias
- Pictures: layers of the abdominal wall at the level of inguinal canal, including its walls

37. Topographical sites of pectoral girdle and arm

- Main points: fossa axilaris, incisura scapulae et spinoglenoidalis, foramen humerotricipitale et omotricipitale, trigonum deltopectorale, fossa cubitalis, canalis cubitalis, pronatorius, supinatorius, carpi et ulnaris, Paron's space, Guiot's space, foveola radialis
- Pictures: cross-section of the arm, forearm, wrist and hand

38. Topographical sites of pelvic girdle and thigh

- Main points: foramen ischiadicum majus et minus, foramen suprapiriforme et infrapiriforme, lacuna vasorum et musculorum, fossa iliopectinea, trigonum femorale, canalis adductorius, fossa poplitea, arcus tendineus muscucli solei, canalis malleolaris, canalis fibularis et musculofibularis
- Pictures: cross-section of the thigh, leg and foot, lacuna vasorum + musculorum, structures behind medial and lateral malleolus

39. Vertebral canal and its contents

- Main points: borders, communications and content of the vertebral canal, spaces formed by spinal membranes, lumbar puncture
- Pictures: cross-section of the vertebral canal

40. Topography of male genital organs

- Main points: intraperitoneal and subperitoneal organs and their mesenteries, spaces in the peritoneal cavity, fasciae, pelvis and urogenital floors, perineal region
- Pictures: sagittal cross-section of the male pelvis

41. Topography of female genital organs

- Main points: intraperitoneal and subperitoneal organs and their mesenteries, spaces in the peritoneal cavity, fasciae, pelvis and urogenital floors, perineal region
- Pictures: sagittal cross-section of the female pelvis