

PRACTICAL CLASSES VI SEMESTER

PRACTICAL CLASS №1

Topic: The subject and aims of topographic anatomy and operative surgery

Plan of the class

I. Check up questions

1. The subject and aims of topographic anatomy and operative surgery.
2. Topographo-anatomical region, external landmark and projection.
3. Classification of surgical instruments and rules of instruments usage.
4. Kinds of surgical sutures and knots.
5. The rules and ways of connection and disconnection of tissues.

II. Practical training

1. Learning of common surgical instruments.
2. Technique of making knots.

PRACTICAL CLASS №2

Topic: Topographic anatomy and operations on the brain department of the head

Plan of the class

I. Check up questions

1. Projections of basic neuro-vascular fascicles.
2. Topography of fronto-parieto-occipital, temporal region.
3. Topography of mastoid region.

4. Venous system of the brain department of the head.
5. Initial surgical d-bridement (treatment of wounds of a head); control of bleeding from vessels of soft tissues, diploic veins, venous sinuses, brain vessels.
6. Decompressive and osteoplastic trepanation of the skull.
7. Anthrotomy. The indications, technique, complications.

II. Practical training

1. Studying of topographo-anatomic regions of the brain department of the head on photos.
2. Learning of special surgical instruments for operations on the brain department of the head.
3. Technique of making and removal of interrupted skin sutures.

III. Reports

1. Stereotaxis in neurosurgery. Cranioplasty.

PRACTICAL CLASS №3

Topic: Topographic anatomy and operations on the face department of the head

Plan of the class

I. Check up questions

1. Projections of basic neuro-vascular fascicles of the face department of the head.
2. Topography of parotidomasseteric region.
3. Topography of buccal region.
4. Topography of deep regions of the face.
5. Venous system of the face department of the head.
6. Characteristics of incisions on the face, requirements to them.
7. Lancing [drain] of the purulent parotitis.
8. Lancing [drain] of the retropharyngeal abscess.

II. Practical training

1. Studying of topographo-anatomic regions of the face department of the head on photos.
2. Learning of special surgical instruments for operations on the face department of the head.
3. Technique of making and removal of interrupted skin sutures.

III. Reports

1. Modern concept about plastic operations on the face department of the head.

PRACTICAL CLASS №4

Topic: Topographic anatomy of the neck

Plan of the class

I. Check up questions

1. Borders, regions and triangles of the neck.
2. Reflexogenic zones of the neck.
3. Fascias of the neck. Their functions.
4. Open and closed fat spaces of the neck.
5. Topography of neck organs.

II. Practical training

1. Studying of topography of neurovascular fascicles and organs of the neck on corps and photos.
2. Technique of hemostasis in operational wound.

PRACTICAL CLASS №5

Topic: Operations on the neck

Plan of the class

I. Check up questions

1. Incisions on the neck.
2. Subclavian vein catheterization by Seldinger. Features of operation on the veins of the neck.
3. Tracheostomy. Indications, kinds, stages, complications. Conicotomy.

4. Operations on thyroid gland. Thyroidectomy. Complications.
5. Ligation of carotid arteries.
6. Operations at pathology of carotid vessels: endarterectomy, balloon dilatation and stentation, prosthetics.

II. Practical training

1. Learning of special surgical instruments for tracheostomy and operations on vessels of the neck.
2. Technique of hemostasis in operational wound.
3. Making of tracheostomy on models.

III. Reports

1. Esophagotomy and esophagostomy.

PRACTICAL CLASS №6

Topic: Topographic anatomy of the chest

Plan of the class

I. Check up questions

1. Layer-by-layer topography of chest wall.
2. Topography of intercostal space.
3. Topography of mammary gland.
4. Topography of diaphragm. Weak places.
5. Topography of mediastinum, pleura, lungs.

II. Practical training

1. Studying of topography of chest wall and organs of chest cavity on corps and photos.
2. Technique of making of interrupted II- and Z-shaped sutures.

PRACTICAL CLASS №7

Topic: Operations on the chest

Plan of the class

I. Check up questions

1. Treatment of purulent mastitis.
2. Treatment of cancer of mammary gland.
3. Approaches to the organs of thoracic cavity.

4. Resection of the rib.
5. Pneumothorax. Kinds. Treatment.
6. The puncture of pleural cavity and pericardium.
7. Operations on lungs and heart.
8. Operations in coronary heart disease.
9. Surgical treatment of acquired and for congenital heart defects.

II. Practical training

1. Studying of topography of chest wall and organs of chest cavity on corps and photos.
2. Learning of special surgical instruments for operations on chest wall and organs of chest cavity.
3. Technique of making of interrupted II- and Z-shaped sutures.

III. Reports

1. Heart transplantation.
2. Operations at cancer of esophagus.

PRACTICAL CLASS №8

Topic: Topographic anatomy of the front abdominal wall

Plan of the class

I. Check up questions

1. Borders and regions of the front abdominal wall.
2. Topography, blood supply, innervation of the front abdominal wall, structure of the sheath of musculus rectus abdominis.
3. Weak places of the front abdominal wall. Surgical anatomy of white line of the abdomen and umbilical ring.
4. Inguinal triangle, inguinal gap, surgical anatomy of inguinal canal: walls, rings, contents.
5. Path of testes' descent to scrotal position.
6. Surgical anatomy of femoral canal: walls, rings.

II. Practical training

1. Studying of topography of front abdominal wall on corps and photos.

2. Technique of making uninterrupted (blanket, Multanovski, mattress) sutures.

PRACTICAL CLASS №9

Topic: Surgical anatomy of the front abdominal wall

Plan of the class

I. Check up questions

1. Classification, elements of hernias. Initiating factors of herniation.
2. Surgical anatomy of congenital and acquired inguinal hernias.
3. Surgical anatomy of femoral hernias.
4. Predisposing and producing factors of umbilical and white line hernias, their surgical anatomy.
5. Stages of herniotomy.
6. Plastics of inguinal canal. Femoral hernias plastics. Umbilical and white line hernias plastics. Herniorrhaphy and hernioplasty. Laparoscopic hernioplasty.
7. Sliding and congenital hernias. Features of operative technique.
8. Strangulated (incarcerated) hernias. Sequence of stages of herniotomy.
9. Approaches to the abdominal cavity, their clinical meaning.

II. Practical training

1. Technique of making uninterrupted (blanket, Multanovski, mattress) sutures.

PRACTICAL CLASS №10

Topic: Topographic anatomy of the hollow organs of abdominal cavity

Plan of the class

I. Check up questions

1. The abdominal cavity and its floors (borders, contents).

2. Topography of bursae (sacks) of upper floor of the abdominal cavity.
3. Topography of recesses, canals, sinuses of lower floor of the abdominal cavity.
4. Topography of stomach and duodenum, blood supply, innervation, lymphatic outflow.
5. Topography of small and large intestine: blood supply, innervation, lymphatic outflow.

II. Practical training

1. Studying of topography of upper and lower floor of abdominal cavity on corps and photos.

PRACTICAL CLASS №11

Topic: Operations on stomach and duodenum

Plan of the class

I. Check up questions

1. Classification of intestinal sutures. Requirements. Kinds of intestinal anastomoses and their characteristics.
2. Gastrostomy by Vitsel, Cader, Toprover. Indications, technique.
3. Suturing of stomach and duodenal perforated ulcer. Indications, technique.
4. Kinds of gastroenterostomy, technique. Kinds of vicious circle.
5. Stomach resection (Bilroth 1, Bilroth 2, Hofmeister-Finsterer). Indications, stages, characteristics. Gastrectomy.
6. Vagotomy (truncal, selective, selective proximal) and draining operations on the stomach. Indications and methods.

II. Practical training

1. Technique of making of end-to-end intestinal anastomoses on models.

III. Reports

1. Modern methods of surgical treatment of stomach and duodenal ulcer.

PRACTICAL CLASS №12

Topic: Operations on small and large intestine

Plan of the class

I. Check up questions

1. Closure of the wound of small intestine. Resection of small intestine: indications, technique.
2. Closure of the wound of large intestine. Resection of large intestine. Kinds of hemicolecotomy.
3. Topography of ileocaecal angle, vermiform appendix. Position of appendix apex and projection of appendix base.
4. Appendectomy. Operative approaches, kinds of operation.
5. Meckel's diverticulum: topography, removal.
6. Intestinal stomas and anus praeternaturalis

II. Practical training

1. Technique of making of side-to-side intestinal anastomoses on models.

PRACTICAL CLASS № 13

Topic: Topographic anatomy of parenchymal organs and anhepatic biliary tracts

Plan of the class

I. Check up questions

1. Topographic anatomy of the liver, blood supply, innervation, lymphatic outflow.
2. Topographic anatomy of anhepatic biliary tracts.
3. Topographic anatomy of the pancreas, blood supply, innervation, lymphatic outflow.
4. Topographic anatomy of the spleen, blood supply, innervation, lymphatic outflow.

II. Practical training

1. Studying of topography of parenchymal organs and anhepatic biliary tracts on corps and photos.
2. Checking of the technique of knots, interrupted skin sutures, hemostasis in operational wound.

PRACTICAL CLASS № 14

Topic: Operations on parenchymal organs and anhepatic biliary tracts

Plan of the class

I. Check up questions

1. Ways and technique of bleeding control from parenchymal organs. Kinds of hemostatic sutures.
2. Resection of liver, pancreas, spleen. Splenectomy.
3. Cholecystectomy: ways, technique, complications.
4. Choledochotomy, biliodigestive anastomoses. Papillosphicterotomy.

5. Pancreaticoduodenal resection.

II. Practical training

1. Learning of instruments for operations on parenchymal organs.
2. Technique of making hemostatic sutures on models.
3. Checking of the technique of making interrupted and uninterrupted musculofascial sutures.

III. Reports

1. Concept about liver, pancreatic and spleen transplantation.

PRACTICAL CLASS № 15

Topic: Concluding session

Plan of the class

I. Check up questions

1. Control test on practical studies 1-14.

II. Practical training

1. Checking of instruments.

PRACTICAL CLASS № 16

Topic: Experimental operation

I. Practical training

1. Technique of making of "side-to-side" intestinal anastomoses in experiment.
2. Technique of making of liver resection in experiment.
3. Technique of making of tracheostomy in experiment.
4. Technique of making of appendectomy in experiment.

PRACTICAL CLASSES VII SEMESTER

PRACTICAL CLASS №1

Topic: Topography of lumbar region and retroperitoneal space.

Operations on kidneys and ureters

Plan of the class

I. Check up questions

1. Borders and layer-by-layer topography of lumbar region.
Weak places.
2. Retroperitoneal space, topographic interrelations of fascias, fat and organs.
3. Topography of kidneys, ureters, epinephroses.
4. Topography of abdominal aorta, inferior vena cava, portal vein.
5. Nerves of retroperitoneal space.
6. Operative approaches to kidneys.
7. Nephrectomy, nephrotomy, nephropexy, pyelotomy, transplantation of kidney. Ureter suture.
8. Paranephral block: indications, technique, topographo-anatomic substantiation.

II. Practical training

1. Studding of topography of retroperitoneal space on corps and photos.
2. Learning of special surgical instruments for operations on kidneys.
3. Technique of making of interrupted skin sutures.

PRACTICAL CLASS №2

Topic: Topographic anatomy of pelvis and perineum

Plan of the class

I. Check up questions

1. Borders and compartments of pelvis.
2. Fascias and fat spaces of pelvis. Way of pus distribution.

3. Vessels, nerves and lymphatic nodes of small pelvis.
4. Topography of perineum.
5. Topography of rectum, urinary bladder, prostate, seminal vesicles, deferent duct, uterus, uterine [fallopian] tubes, ovary.
6. Ways of pelvic fat spaces draining.
7. Paracentesis of urinary bladder, cystotomy, cystostomy.
8. Concept about operations on uterus, ovaries and fallopian tube. Indications and technique of pudendal block and puncture of abdominal cavity through posterior vaginal fornix.
9. Prostatectomy.
10. Operations at hydrocele and varicocele.
11. Operations at hemorrhoid and operations at malignant neoplasms of rectum.

II. Practical training

1. Studding of topography of pelvic organs and fat spaces on corps and photos.
2. Learning of special surgical instruments for operations on organs of small pelvis.
3. Technique of hemostasis in operational wound.

PRACTICAL CLASS №3

Topic: Topographic anatomy of the shoulder girdle, arm and cubital region

Plan of the class

I. Check up questions

1. External landmarks and projection of basic neurovascular fascicles of the shoulder girdle, arm and cubital region.
2. Topography of infraclavicular, scapular, deltoid and axillary regions.
3. Topography of the shoulder joint. Weak places of articular capsule, bursal sacs, recesses. Practical significance of these formations.
4. Topography of the arm.

5. Topography of the cubital region.
6. Topography of the cubital joint. Features of topography of articular capsule.

II. Practical training

1. Studying of topography of the shoulder girdle, arm and cubital region on corps and photos.
2. Technique of making of interrupted musculofascial sutures (Π- and Z-shaped).

PRACTICAL CLASS №4

Topic: Topographic anatomy of the forearm and hand. Surgical treatment of pyoinflammatory diseases of the hand

Plan of the class

I. Check up questions

1. External landmarks and projection of basic neurovascular fascicles of the forearm and hand.
2. Topographic anatomy of the forearm.
3. Topography of osteo-fibrous and synovial formations of the region of radiocarpal joint and the hand.
4. Topography of fascial compartments and fat spaces of the hand.
5. Topography of superficial and deep arterial palmar arches, median, radial, ulnar nerves on the hand.
6. "Prohibited area" of the hand, borders, anatomical significance.
7. Topographic anatomy of fingers of the hand.
8. Pyoinflammatory diseases of the hand. Classification. Surgical treatment.

II. Practical training

1. Studying of topography of the forearm and hand on corps and photos.
2. Technique of making of uninterrupted musculofascial sutures (blanket, Multanovski, mattress).

PRACTICAL CLASS №5

Topic: Topographic anatomy of the gluteal region, hip and popliteal fossa. Topography of the hip joint

Plan of the class

I. Check up questions

1. External landmarks and projection of basic neurovascular fascicles of the gluteal region and hip.
2. Topographic anatomy of the gluteal region. Topography of supra- and infrapiriform openings.
3. Hip joint, topographo-anatomical features of structure.
4. Topography of vascular and muscular lacunas, contents.
5. Surgical anatomy of femoral triangle.
6. Topography of obturator canal.
7. Topography of adductor canal.
8. Topography of posterior region of the hip.
9. Topographic anatomy of the popliteal space, syntopy of neurovascular fascicle.

II. Practical training

1. Studying of topography of the gluteal region, hip and popliteal space on corps and photos.
2. Checking of the technique of making of interrupted skin sutures and knots.

PRACTICAL CLASS №6

Topic: Topographic anatomy of the knee joint, leg, ankle joint and foot

Plan of the class

I. Check up questions

1. External landmarks and projection of basic neurovascular fascicles of the leg and foot.
2. Topography of knee joint (bursal sacs, recesses, menisci and ligaments).
3. Topographic anatomy of anterior region of the leg.

4. Topographic anatomy of posterior and lateral regions of the leg.
6. Canals of the leg: cruropopliteal, superior and inferior musculoperoneal.
7. Topography of anterior, posterior, lateral and medial parts of the ankle joint region.
8. Topography of dorsal surface of the foot.
9. Topography of plantar surface of the foot.
10. Topographic anatomy of joints of the foot.

II. Practical training

1. Studying of topography of the knee joint, leg and foot on corps and photos.
2. Checking of the technique of making interrupted and uninterrupted musculofascial sutures.

PRACTICAL CLASS №7

Topic: Operations on vessels, nerves, tendons and joints

Plan of the class

I. Check up questions

1. Projection of basic neurovascular fascicles of the extremities. Operative approaches to vessels and nerves (direct and indirect).
2. Ways of bleeding control at injury of main vessels.
3. Indications and technique of ligation of vessels in wound and in the course. Ways of collateral circulation at injury of axillary, brachial and femoral arteries.
4. Suture of vessel: classification, requirements. Technique of suture of vessel by Carrel.
5. Conception about reconstructive operations on vessels (desobliterating and plastic operations). Conception about bypass operations. Operations at aneurysms of vessels.
6. Operations at varix dilatation of veins of lower extremity.
7. Classification of injuries of nerves. Kinds of nerve regeneration.

8. Suture of nerve. Classification. Requirements.
9. Suture of tendon. Classification. Requirements. Conception about tendon plastics.
10. Indications and technique of joint puncture.
11. Concept about arthrotomy, arthroplasty, arthrodesis, arthrorisis and resection of joints.

II. Practical training

1. Acquaintment with work of vascular anastomosis apparatus.
2. Technique of making of Carrel vessel' suture.
3. Technique of making of Kyuneo tendon' suture.
4. Checking of the technique of hemostasis in operational wound.

PRACTICAL CLASS №8

Topic: Operations on bones of extremities. Amputations and exarticulations

Plan of the class

I. Check up questions

1. Fractures: classification, treatment.
2. Kinds of osteosynthesis (extramedullary, intramedullary, compressive-distractive).
3. Osteotomy: indications, classification.
4. Bone resection: indications, classification. Conception about osteoplasty.
5. Amputations and exarticulations: indications, classification.
6. Stages of amputation. Ways of procession of periosteum, vessels, nerves and soft tissues.
7. Conception about circular, flap and osteoplastic amputations.
8. Conception about prosthesis of extremities.

II. Practical training

1. Checking of learning of common and special surgical instruments.
2. Examination tests.

