PRACTICAL STUDY VI SEMESTER

Practical study №1

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

**I. Control 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 study №2

**Topic:** Topographic anatomy and operations on the head

**I. Control questions:**
1. Projections of basic neuro-vascular fascicles.
2. Topography of fronto-parieto-occipital region, temporal and mastoid regions.
3. Topography of parotidomasseteric region.
4. Topography of deep region of the face.
5. Venous system of the head.
6. Initial surgical d-bridement (treatment of wounds of a head); arrest of bleeding from vessels of soft tissues, diploic veins, venous sinuses, brain vessels.
7. Decompressive and osteoplastic trepanation of the skull.
8. Anthrotomy. The indications, technique, complications.
9. Characteristics of incisions on the face, requirements to them.
10. Lancing [drain] of the purulent parotiditis.

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

III. Reports:
2. Modern conception about plastic operations on face department of the head.

Practical study №3

**Topic:** Topography of the neck. Operations on neck organs

I. Control 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.
6. Incisions on the neck.
9. Ligation of carotid arteries.

II. Practical training:
1. Studying of topography of neurovascular fascicles and organs of the neck on corps and photos.
2. Learning of special surgical instruments for tracheostomy and operations on vessels of the neck.
3. Technique of hemostasis in operational wound.
III. Reports:

**Practical study №4**

**Topic:** Topographic anatomy and operations on the chest

**I. Control questions:**
1. Layer-by-layer topography of chest wall.
2. Topography of intercostal space.
3. Topography of mammary gland.
4. Topography of diaphragma.
5. Topography of mediastinum, pleura, lungs.
6. Treatment of purulent mastitis.
7. Treatment of cancer of mammary gland
8. Approaches to the organs of thoracic cavity.
9. Resection of the rib.
11. Pleurocentesis.
12. Operations on lungs and heart.

**II. Practical training:**
1. Studding 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.

**III. Reports:**
1. Heart transplantation.

**Practical study №5**

**Topic:** Topographic anatomy of the front abdominal wall.
Hernias of the front abdominal wall
I. Control questions:
1. Topography, blood supply, innervation of the front abdominal wall.
2. Weak places of the front abdominal wall.
3. Surgical anatomy of inguinal and femoral canals.
4. Surgical anatomy of white line of the abdomen and umbilical ring.
5. Approaches to the abdominal cavity.
7. Herniotomy, stages.
8. Surgical anatomy of congenital and acquired inguinal hernias.
10. Sliding and congenital hernias. Features of operative technique.
11. Strangulated (incarcerated) hernias. Sequence of stages of herniotomy.

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 study №6

Topic: Topographic anatomy and operations on upper compartment of abdominal cavity

I. Control questions:
1. Topography of bursae (sacks) of upper compartment.
2. Topography of stomach and duodenum, blood supply, innervation, lymphatic outflow.
7. Gastroenteroanastomoses.
8. Stomach resection (Bilroth 1, Bilroth 2).

II. Practical training:
1. Studying of topography of the upper floor of abdominal cavity on corps and photos.
2. Learning of special surgical instruments for operations on hollow organs of abdominal cavity.
3. Technique of making of intestinal sutures on models.
4. Technique of making of "end-to-end" intestinal anastomoses on models.

Practical study №7

**Topic:** Topography and operations on small and large bowel

I. Control questions:
1. Peritoneal fossae (recesses, canals, sinuses).
2. Topography of small and large intestine: blood supply, innervation, lymphatic outflow.
3. Topography of iliocaecal angle and appendix. Position of the appendix.
5. Closure of the wound of intestine and large bowel resection. hemicolecctomy.
7. Intestinal stomas and anus praeternaturalis.

II. Practical training:
1. Studding of topography of the lower floor of abdominal cavity on corps and photos.
2. Technique of making of resection of small intestine with "side-to-side" and "end-to-end" anastomoses on autopsied specimens.

Practical study №8
**Topic: Operations on parenchymatous organs**

**I. Control questions:**
1. Topography of liver.
2. Topography of spleen, pancreas.
3. Topography of anhepatic biliary tracts.
5. Resection of liver, spleen, pancreas.
6. Cholecystectomy.
7. Cholecystostomy.
8. Choledochotomy.

**II. Practical training:**
1. Studying of topography of parenchymal organs and anhepatic biliary tracts on corps and photos.
2. Learning of special surgical instruments for operations on parenchymal organs.
3. Technique of making of hemostatic sutures on autopsied specimen and models.

**III. Reports:**
1. Concept about liver, pancreatic and spleen transplantation.

**Practical study №9**

**Topic: Concluding session**

**I. Control test on practical studies 1-8.**

**II. 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 STUDY VII SEMESTER

Practical study №1

Topic: Topography of lumbar region and retroperitoneal space. Operations on kidneys and ureters

I. Control questions:
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.

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 study №2

Topic: Topographic anatomy of pelvis and perineum

I. Control questions:
3. Vessels, nerves and lymphatic nodes of small pelvis.
4. Topography of perineum.
7. Pudendal block, puncture of abdominal cavity through posterior vaginal fornix. Indications, technique.
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 study №3**

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

**I. Control 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.

**II. Practical training:**
1. Studding 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 study №4

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

**I. Control 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.

**II. Practical training:**

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

Practical study №5

**Topic:** Topographic anatomy of the gluteal region, hip and popliteal space. Topography of hip join.

**I. Control 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. Studding 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 study №6

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

I. Control 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.
5. Canals of the leg: cruropopliteal, superior and inferior musculoperoneal.
6. Topography of anterior, posterior, lateral and medial parts of the ankle joint region.
7. Topography of dorsal surface of the foot.
8. Topography of plantar surface 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 study №7

Topic: Operations on vessels, nerves, tendons and joints

I. Control 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.
10. Indications and technique of joint puncture.
11. Conception 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 study №8

**Topic:** Operations on bones of extremities. Amputations and exarticulations

**I. Control questions:**
2. Kinds of osteosynthesis (extramedullary, intramedullary, compressive-distractive).
5. Amputations and exarticulations: indications, classification.
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.
2. Examination tests.

**III. Controllable independent work:**
1. Conception about microsurgery and extremity replantation.