

**MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE
RUSSIAN FEDERATION FEDERAL STATE AUTONOMOUS
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
NORTH CAUCASUS FEDERAL UNIVERSITY**

Methodological Guidelines
for Students on arranging and performing independent work
in the Discipline "TOPOGRAPHIC ANATOMY AND
OPERATIVE SURGERY"
for Students majoring (Specialty) in 31.05.01 General Medicine

Methodological Recommendations for Studying Theoretical Material

When performing the independent study of theoretical material, the student must follow the rules as set below. The working curriculum of the respective academic discipline shall be recommended to be used as the basis for such activity. According to the schedule of classroom lessons and independent work, a different number of hours is to be allocated for studying individual topics. A significant portion of the student's independent work should be allocated to mastering the material on the covered topic, writing a summary (notes) on the specified theoretical blocks, and searching for additional literature based on the NCFU library and via the Internet system. The lecture material shall not cover all theoretical material; the greater part of it must be mastered through independent work. Given the above, working with the recommended literature is mandatory. Special attention must be paid to the content of the main provisions and conclusions, the explanation of phenomena and facts, and the understanding of the practical application of the theoretical issues under consideration. In the process of this work, the student should strive to understand and memorize the main provisions of the material being considered, the examples illustrating it, as well as to understand the illustrative material. Preparation should be completed by drawing up a plan (summary/notes) on the material (issue) being studied. This allows for the creation of a concentrated, concise representation of the issues being studied. First, studying the recommended literature is to be done. Special attention must be paid to the content of the main provisions and conclusions, the explanation of phenomena and facts, and the understanding of the practical application of the theoretical issues under consideration.

During this work, the student should strive to understand and memorize the main provisions of the material being considered, the examples illustrating it, as well as to understand the illustrative material. Preparation should be completed by drawing up a plan (summary/notes) on the material (issue) being studied. This allows for the creation of a concentrated, concise representation of the issues being studied. If necessary, one should seek (advice) consultation from the instructor. When going to a consultation, it is necessary to thoroughly think through the questions that require clarification. Keeping records contributes to turning reading into an active process, mobilizing motor memory along with visual memory. The following should be born in mind: a student who systematically keeps records creates their own individual stock of auxiliary materials for a quick review of what has been read and for the mobilization of accumulated knowledge. Records are especially important and useful when they reflect the thoughts that arose during independent work.

It is important to develop the students' capacity to compare sources and to think through the material being studied.

Improving note-taking skills among students is of great importance.

The instructor may recommend the following main forms of recording to students: a plan (simple and detailed), excerpts, and theses (abstracts).

The results of note-taking can be presented in various forms.

- A plan is an outline of the read material, a brief (or detailed) list of questions reflecting the structure and sequence of the material.
- A detailed plan fully replaces a summary.
- A summary (notes) is a systematized, logical presentation of the source material. Four types of summaries are distinguished:
 - Outline-summary (Plan-notes) – this is an expanded, detailed plan in which sufficiently detailed records are provided for those points of the plan that need explanation.
 - Textual summary – this is the reproduction of the most important provisions and facts of the source.
 - Free summary – these are clearly and briefly formulated (stated) main provisions resulting from a deep understanding of the material. It may contain excerpts, quotations, and theses; part of the material may be represented by a plan.
 - Theme-based summary – this is compiled on the basis of studying a number of sources and gives a more or less exhaustive answer according to a certain scheme (issue).

Methodological Guidelines for the Preparation for Practical Activities

When preparing for practical activities, the recommendation implies studying the control questions for the given lesson and the theoretical material from one's own notes.

The main form of work during the lessons is an interview (discussion). Each student must be ready to speak on all issues raised in the plan and demonstrate maximum activity during their consideration.

The speech must be constructed freely, convincingly, and with arguments. The instructor ensures that the speech is not reduced to a reproductive level (simple reproduction of the text); simple reading of the summary is also not allowed.

It is necessary for the speaker to show their own attitude towards what they are talking about, express their personal opinion and understanding, substantiate it, and be able to draw the correct conclusions from what has been said. In doing so, the student may refer to the entries in the summary, directly to the primary sources, use knowledge of previously studied disciplines, etc. In addition, to obtain a grade at an advanced level, students solve situational tasks based on the results of the mastered topics.

During the execution of practical works, a defense of practical skills is provided, the full list of which is specified in the fund of assessment tools.

Methodological Recommendations for the Preparation of Presentations and Reports

The report must contain elements of novelty; along with the fundamental aspect, an analysis of the current state of the problem under study must be carried out, as well as inclusion in regional issues. The report must include an introduction, a theoretical part, a conclusion, a list of literature, and a presentation that reveals the essence of the topic in graphs, pictures, diagrams, and formulas.

The report is recommended to be submitted on 1 printed sheet. The text of the work must be printed with 1.5 line spacing on one side of a standard sheet (A4) of white paper.

The text and other printed elements of the work must be black, and the contours of letters and signs must be clear, without halos and shading. The font must be Times New Roman, size 14. The titles of chapters and paragraphs are highlighted in bold. The sheet with text must have margins: left – 30 mm, right – 10 mm, top – 20 mm, bottom – 20 mm.

Page numbering of the text is done in the lower right corner of the sheet. It is necessary to number pages starting from the page where the Introduction is printed, on which the number 3 is placed. After that, all pages, including appendices, are numbered.

A space equal to two intervals is placed between the title of the chapter and the title of the paragraph of this chapter, and the title of the paragraph must not be separated from the text of this paragraph by a space. The titles of paragraphs shall be separated from the text of the previous paragraph by a space equal to two intervals. Each chapter, as well as the introduction, conclusions, appendices, and the list of used literature, begin on a new page. The word Chapter is not to be written. Chapters have ordinal numbers within the entire work, designated by Arabic numerals (for example: 1, 2, 3), followed by a period.

The word **PARAGRAPH** or the paragraph symbol (§) is not placed in the title. Paragraphs have ordinal numbers within the chapters, designated by Arabic numerals (for example: 1.1. and 1.2.).

Headings of chapters and paragraphs in the text must be centered; a period shall not be placed at the end of the title of the chapter and paragraph. It is not allowed to hyphenate (transfer) a part of a word in a heading. 4.5. The numbering of tables and figures can be running (continuous) or relate to the number of the chapter and paragraph. For example, if a table or a figure is included in the text of the first paragraph of the second chapter, the numbering is as follows: Table 2.1.1., Fig. 2.1.1.

The last digit means the ordinal number of the table (or figure) in this paragraph.

The table is to be placed as the next page after the first mention of it in the text.

Methodological guidelines

for completing laboratory work

in the discipline "TOPOGRAPHIC ANATOMY AND OPERATIVE SURGERY "
for students of the specialty 31.05.01 General Medicine

Introduction

The goal is anatomical and surgical training of students to provide the basic knowledge and skills necessary for subsequent studies at clinical departments and in independent medical practice to achieve the set learning goals. Formation of students' general professional and professional competencies.

The main objectives of the discipline are:

formation of students' knowledge of the topographic anatomy of areas, organs and systems;

formation of students' skills to apply the acquired topographic and anatomical knowledge to substantiate the diagnosis, understanding anatomical "risk factors", explaining the features of the course of pathological processes, solving diagnostic and surgical tasks;

Students' mastery of the basic elements of surgical operations and some typical surgical skills and techniques.

As a result of studying the discipline, the student should know:

- A list of laboratory and instrumental research methods for assessing the patient's condition, the main medical indications for conducting research and interpreting the results
- Etiology, pathogenesis and pathomorphology, clinical picture, differential diagnosis, features of the course, complications and outcomes of diseases of internal organs
- Methods of collecting complaints and medical history from patients (their legal representatives)
- Methods of physical examination of patients (examination, palpation, percussion, auscultation)
- Clinical signs of sudden cessation of blood circulation and/or respiration
- Rules of basic cardiopulmonary resuscitation
- Principles of operation of devices for external electrical pulse therapy (defibrillation)
- Rules for performing external electrical pulse therapy (defibrillation) in case of sudden cessation of blood circulation and/or respiration

Modern methods of using medicines, medical devices and therapeutic nutrition in patients with diseases and conditions in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care

-The mechanism of action of medicines, medical devices and therapeutic nutrition, medical indications and contraindications to their use; complications caused by their use

-Modern methods of non-drug treatment of diseases and conditions in a patient in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care

The mechanism of action of non-drug treatment; medical indications and contraindications to its use; side effects, complications caused by its use

-The procedure for providing palliative care.

- International Statistical Classification of Diseases (ICD) - principles of classification of diseases, basic concepts of general nosology - clinic of various diseases

- management tactics for patients with various diseases

- fundamentals of legislation on the sanitary and epidemiological welfare of the population

Must be able to:

-Identify clinical signs of conditions requiring urgent medical care

-Carry out emergency medical care measures

-Identify conditions that require emergency medical care, including clinical signs of sudden cessation of blood circulation and respiration

-Perform basic cardiopulmonary resuscitation in combination with electropulse therapy

(defibrillation)

- draw up a treatment plan for the disease and the patient's condition, taking into account the diagnosis, age of the patient, and the clinical picture of the disease in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care
- Prescribe medicines, medical devices and therapeutic nutrition, taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for providing medical care, clinical recommendations (treatment protocols) on the provision of medical care
- Prescribe non-drug treatment, taking into account the diagnosis, age and clinical picture of the disease in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care
- Evaluate the effectiveness and safety of the use of medicines, medical devices and therapeutic nutrition
- formulate a diagnosis based on ICD-10 based on clinical and additional research methods. - analyze the role of social and biological factors in the development of diseases, understand the pathogenesis of diseases, and their impact on the development of diseases, evaluate laboratory data for various somatic and infectious diseases and pathological processes.
- determine the scope and location of necessary treatment measures for patients
- plan, analyze and evaluate the quality of medical care, the health status of the population and the impact of environmental and industrial factors on it;
- to justify from a microbiological standpoint the choice of research material for the diagnosis of infectious and opportunistic diseases

Must own:

- Skills in assessing the patient's condition requiring emergency or emergency medical care
- Skills in recognizing conditions that occur with sudden acute illnesses, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and requiring urgent medical care
- Skills in providing emergency medical care to patients with sudden acute illnesses, conditions, and exacerbation of chronic diseases without obvious signs of a threat to the patient's life
- Skills in recognizing conditions that pose a threat to the patient's life, including states of clinical death (stopping vital functions of the human body (blood circulation and/or respiration) that require emergency medical care
- Skills in providing emergency medical care to patients in conditions that pose a threat to the patient's life, including clinical death (stopping vital functions of the human body (blood circulation and/or respiration)
- Skills in the use of medicines and medical devices in the provision of emergency or emergency medical care.
- Skills in developing a treatment plan for a disease or condition, taking into account the diagnosis, age and clinical picture in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care
- Skills in prescribing medicines, medical devices and therapeutic nutrition, taking into account the diagnosis, age and clinical picture of the disease and in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care
- Skills in prescribing non-drug treatment, taking into account the diagnosis, age and clinical picture of the disease in accordance with current medical care procedures, clinical recommendations (treatment protocols) on medical care
- Skills in assessing the effectiveness and safety of the use of medicines, medical devices,

therapeutic nutrition and other treatment methods

- Skills in providing palliative care when interacting with specialist doctors and other medical professionals
 - Skills in organizing personalized treatment of patients, including pregnant women, elderly and senile patients, assessment of the effectiveness and safety of treatment
 - skills in determining the patient's main pathological conditions, syndromes, and symptoms in accordance with ICD-10.
 - skills in drawing up an individual treatment and rehabilitation program, processing medical documentation for patients with various diseases
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- assessments of the state of public health;
 - methods of general clinical examination;
 - interpretation of the results of laboratory and instrumental diagnostic methods;
 - basic skills of working with materials in hygienic studies containing pathogenic and opportunistic microorganisms

Introduction to topographic anatomy and operative surgery.

The subject and objectives of topographic anatomy and operative surgery, the place of discipline in the system of higher medical education. The role of Russian scientists in the formation and development of the national school of topographic anatomy and operative surgery.

Russian schools of topographic anatomists and surgeons. Basic concepts of topographic anatomy: area and its boundaries, projection of anatomical formations onto the surface, holotopy, skeletotopy, organ syntopy, fascial vaginas, neurovascular formations, cellular spaces, collateral blood circulation. The doctrine of the individual variability of human organs and systems. Modern methods of topographic anatomy research in clinical conditions and on a human corpse.

Operative surgery and its tasks. The doctrine of surgical operations. Classifications of surgical operations. Basic surgical procedures, surgical techniques, and stages of surgery. Terminology. Surgical instruments and their classification, modern diagnostic and therapeutic equipment. Characteristics of the suture material. Methods of local anesthesia.

Topographic anatomy and operative abdominal surgery

Topographic anatomy of the anterior abdominal wall. Boundaries, division into regions, layered topography, the structure of the vagina of the rectus muscle, inguinal and femoral canals. Classification of abdominal hernias. Operative access, hernial sac treatment and hernial gate plastic surgery for inguinal, femoral and umbilical hernias. Herniation in case of a pinched hernia. Topography of abdominal organs. Intestinal sutures, formation of intestinal anastomoses ("end to end", "side to side", "end to side"), general principles of operations on hollow abdominal organs.

Topographic anatomy and operative surgery of the pelvis

Topographic and anatomical justification of operations on the pelvic organs. Three floors of the basin. Operative access to the pelvic organs. Puncture, high cross-section of the bladder, cystostomy, adenomectomy, puncture of the posterior arch, surgery for tubal pregnancy, supravaginal amputation, extirpation of the uterus, ligation of hemorrhoids, amputation, resection and extirpation of the rectum.

Topographic anatomy and operative breast surgery.

Chest wall. Borders, external landmarks, layers. Topography of intercostal spaces, internal thoracic vessels, pleural sacs, sinuses, interpleural spaces.

The diaphragm, its structure, and the weak points of the diaphragm. Mammary gland: its

structure, cellular spaces, blood supply, innervation, regional lymph nodes (pathways of lymph outflow from the breast). The chest cavity. Projection of organs, heart valves, aorta, pulmonary trunk and large vessels onto the chest wall. Topography of the lungs, trachea and bronchi, and the roots of the lungs. Segments of the lungs. Mediastinum, boundaries, division.

Clinical anatomy of organs and vessels of the anterior mediastinum and posterior mediastinum. Lymph nodes of the mediastinum. Anatomical and physiological justification of surgical interventions. Types of thoracotomies. The suture of the lung. Extrapleural and transpleural accesses to the heart. Pericardial puncture. The suture of the heart. Principles of surgery for coronary heart disease. Autopsy of purulent mediastinitis. Breast surgery for malignant and benign tumors. Incisions in purulent mastitis. Puncture of the pleural cavity, thoracocentesis, rib resection, primary surgical treatment of penetrating wounds of the chest wall, operations for valvular pneumothorax.

Head surgeries and their topographic and anatomical justification

Boundaries and external landmarks of the head, its division into facial and cerebral divisions, individual differences. Brain department, brain department areas, layered structure of areas. Clinical significance. Primary surgical treatment of penetrating head wounds. Bone-plastic and resection trepanation of the skull.

Operations on the neck organs and their topographic and anatomical justification

Topographic and anatomical justification of neck surgeries. Dividing the neck into regions. Anterior neck area: supra-lingual and sublingual areas. Layered structure of the neck. General principles of neck surgery. Access to the neck organs. Temporary and final stop of bleeding in case of injury to large vessels of the neck. Tracheostomy.

Operations on blood vessels, nerves, and tendons. Amputations and exarticulations

Vascular surgery. Vascular suture, plastic and reconstructive vascular surgery, surgery for aneurysms, varicose veins. The concept of microsurgical technique in vascular surgery. Suture of nerve and tendon. Amputations of limbs. General principles of limb truncation. The types of amputations depend on

the time of execution, the shape of the incision, and the composition of the tissues that make up the flaps. Methods of treatment of blood vessels, nerves, bones and periosteum. The main stages of the operation, the principles of amputation stump formation. General principles of exarticulations.

Topographic anatomy and operative surgery of the head.

Osteoplastic trepanation of the skull: indications, tools, technique of execution.

2. Decompressive trepanation of the skull according to Cushing.

3. Plastic surgery of skull defects.

4. Primary surgical treatment of penetrating and non-penetrating lesions of the frontal-parietal-occipital region.

5. Methods of stopping bleeding in case of damage to the soft tissues and bones of the cranial vault, middle meningeal artery, venous sinuses.

6. Lumbar puncture technique.

7. Drainage operations for dropsy of the brain.

8. Ligation of the middle meningeal artery.

9. Operations for tongue cancer (2 stages).

10. Maxillectomy.

11. Uranoplasty.

12. Local anesthesia in maxillofacial surgery.

13. Parotid gland abscess: possible complications, autopsy technique.

14. Trepanation of the mastoid process.

15. Operations on the nasal cavities (puncture and trepanation).
16. Opening of the maxillary sinus by Caldwell Hatch.

Topographic anatomy and operative neck surgery.

Neck

1. Surgical accesses to the neck organs (longitudinal, oblique, transverse, combined).
2. Features of primary surgical treatment of neck wounds.
3. Exposure of the carotid arteries. Ligation of the external carotid artery.
4. Vagosympathetic blockade of Vishnevsky.
5. Vanach and Krail operations.
6. Anesthesia of the cervical plexus.
7. Blockage of the brachial plexus by Kulenkampf
8. External drainage of the thoracic lymph duct, lymphosorption.
9. Thyroid surgery (for nodular goiter, thyrotoxicosis,

and cancer).

10. Upper tracheostomy: indications, surgical technique.
11. Lower tracheostomy.
12. Conicotomy.
13. Access to the cervical part of the esophagus.
14. Ligation of the common carotid artery.
15. Ligation of the subclavian artery.
16. Puncture and catheterization of subclavian vein.

Chest

1. Puncture of the pleural cavity.
2. Pericardial puncture.
3. Drainage of the pleural cavity.
4. Types of pneumothorax and operations for them.
5. Surgical interventions for penetrating wounds of the thoracic cavity.

6. Anterolateral and posterolateral access to the lungs. Indications and methods of performing radical lung surgery (segmentectomy, lobectomy, pneumonectomy).

7. Access to the heart.
8. Vascular bypass surgery.
9. Suturing of an open arterial duct.
10. Surgical treatment of stenosis of the left atrioventricular orifice (valvulotomy).
11. Suturing of the heart wound.
12. The concept of extracorporeal blood circulation and heart transplantation.
13. Breast surgery for malignant and benign tumors.
14. Mastectomy. Removal of the retrosternal lymph nodes.
15. Surgical treatment of purulent mastitis.
16. Surgical access to the thoracic esophagus.
17. Plastic surgery of the esophagus according to Ru-Herzen-Yudin (5 stages).

Belly

1. Laparotomy, types of comparative assessment. Abdominal puncture (paracentesis).
2. Classification of abdominal hernias. 3. The main stages of operations for hernias of the anterolateral abdominal wall.
4. Herniation for inguinal hernia. 5. Herniation for femoral hernia.
6. Hernial sac treatment for congenital and acquired inguinal hernia.
7. Methods of hernial gate plastic surgery for umbilical hernias and hernias of the white line of the abdomen. Plastic surgery of aponeurosis according to Lexer, Mayo.
8. Surgical instruments used in appendectomy.

9. Methods and techniques of applying manual and mechanical intestinal sutures. Suturing of the intestinal wound.
10. Surgical treatment of acute intestinal obstruction.
11. Types of small intestinal fistulas: food intake and discharge.
12. Features of operations on small and large intestines.
13. Formation of the intestinal stump according to Doyen. Types of intestinal anastomoses, instruments, the order of sutures when applying anastomoses.
14. The imposition of a fecal fistula and an unnatural anus.
15. Appendectomy. The stages of removing the vermiform appendix. Operational access of Volkovich-Dyakonov, Lenander-Dobrotvorsky. Methods of processing the stump. Retrograde appendectomy. Laparoscopic methods of removing the appendix.
16. Technique of suturing perforated gastric ulcer.
17. Gastrostomy, its types.
18. Gastrointestinal mouths, their types. The vicious circle and the reasons for its development.
19. Gastric resection according to Billrot-1, Billrot-2, their modern modifications.
20. Stomach, selective and proximal selective vagotomy. Drainage operations.

The basin

1. Puncture of the posterior vaginal arch, colpotomy.
2. Methods of drainage of cellular spaces of the small pelvis.
3. Surgical interventions for intraperitoneal and transperitoneal wounds of the bladder.
4. Extraperitoneal puncture of the bladder. Cystotomy and cystostomy.
5. Surgery for prostate hypertrophy.
6. Operations for ectopic pregnancy.
7. Operations for testicular dropsy according to Winkelmann and Bergman-Winkelmann.
8. Operations for cryptorchidism, phimosis and paraphimosis.
9. The concept of radical surgery for rectal cancer, perineal amputation of the rectum, peritoneal extirpation of the rectum.
10. Operations on the uterus (cervical amputation, supravaginal amputation, simple extirpation and radical Wertheim surgery).
11. Hemorrhoid surgery, opening of pararectal abscesses.

Limbs

1. Principles and techniques of primary surgical treatment of limb wounds.
2. Incisions for phlegmon of the upper arm, shoulder, forearm, hand and panaritium.
3. Incisions for phlegmon of the gluteal region, thigh, shin, foot.
4. Technique of temporary and final stopping of bleeding.
5. Catheterization of the main vessels according to Seldinger.
6. Exposure of the arteries, ligation of the arteries in the wound and throughout, taking into account the collateral circulation. Ligation of the femoral artery.
7. Exposure of the arteries, ligation of the arteries in the wound and throughout, taking into account the collateral circulation. Ligation of lower leg vessels.
8. Exposure of the arteries, ligation of the arteries in the wound and throughout, taking into account the collateral circulation. Ligation of shoulder vessels.
9. Exposure of the arteries, ligation of the arteries in the wound and throughout, taking into account the collateral circulation. Ligation of the axillary artery.
10. Requirements for vascular suture. The Carrel and Morozova seam. Microsurgical technique.
11. Access to nerves. Principles of operations on peripheral nerves: neurolysis, nerve suture.
12. Operations on tendons. Types and techniques of tendon suture. Requirements for the tendon suture. Tendon suture according to Lange, Bennell. The concept of tendoplasty.
13. Principles of treatment of bone fractures.

14. Osteosynthesis: extramedullary, intramedullary.
 15. Definition of the concept: amputation, exarticulation, resection.
 16. Classification of amputations. Primary, secondary, late and repeated amputations.
- General principles of limb truncation.
17. Amputation methods: circular, oval, patchwork. Methods of amputation stump hiding. A vicious stump.
 18. Methods of treatment of skin, muscles, vessels, nerves, periosteum and bones during amputation. Choosing the amputation level and calculating the flap length
 19. Amputation of the shoulder.
 20. Rules for truncating the fingers of the hand. Amputation and articulation in the interphalangeal and metacarpophalangeal joints.
 21. The concept of finger and foot replantation in case of injury.
 22. Three-stage circular amputation of the hip by Pirogov.
 23. Bone-plastic amputation of the lower leg according to Pirogov.

Recommended literature.

The list of basic literature:

1. Volkov, A.V. Practicum on topographic anatomy and operative surgery: a textbook / A.V. Volkov, G. M. Ryngach. Novosibirsk: NSMU, 2019. 440 p. ISBN 978-5-85979-284-9. Text: electronic // Lan: electronic library system. – URL: <https://e.lanbook.com/book/145045>
2. Kabak, S. L. A short course in topographic anatomy [Electronic resource]: textbook / S. L. Kabak. – The electron. text data. – Minsk: Higher School, 2014. – 224 p. – 978-985-06-2313-3. – Access mode: <http://www.iprbookshop.ru/35491.html>
3. Fundamentals of operative surgery / O. B. Begishev, A. N. Bubnov, A.V. Gulyaev [et al.] ; edited by S. A. Simbirtsev. – Saint Petersburg: Foliant, 2015. – 728 p. – ISBN 978-5-93929-256-6. – Text: electronic // IPR BOOKS Electronic Library system: [website]. – URL: <http://www.iprbookshop.ru/60933.html>

List of additional literature:

1. Bogdanov, V. G. A guide to practical exercises in topographic anatomy and operative surgery: a textbook / V. G. Bogdanov, P. G. Khokhlov, L. A. Bedrinsky. Kemerovo: Kemerovo State Medical Academy, 2009. - 204 p. – ISBN 2227-8397. – Text: electronic // IPR BOOKS Electronic Library system: [website]. – URL: <http://www.iprbookshop.ru/6208.html>
2. Methodological recommendations for preparing for practical classes in topographic anatomy and operative surgery / A. G. Goncharov, E. V. Namokonov, A. A. Kashafeeva, A.V. Potopin. Chita: Chita State Medical Academy, 2011. 90 p. ISBN 2227-8397. Text: electronic // IPR BOOKS Electronic Library system: [website]. – URL: <http://www.iprbookshop.ru/55318.html>
3. A workshop on operative surgery. Laparoscopic surgery: a textbook / A.V. Protasov, E. D. Smirnova, D. L. Titarov, Z. S. Kaitova. – Moscow: Peoples' Friendship University of Russia, 2013. – 128 p. – ISBN 978-5-209-05476-4. – Text: electronic // IPR BOOKS Electronic Library System: [website]. – URL: <http://www.iprbookshop.ru/22214.html>

Online resources:

1. <http://rudoctor.net/> / - Medical Portal
2. <http://www.e-reading.club/> / - Large Online Library
3. <http://www.pubmed.com/> / - database of full-text articles on medicine
4. <http://www.spravocnikpolekarstvam.ru/> / - free online pharmacological reference
5. <https://dic.academic.ru/> / - Dictionaries and encyclopedias
6. <https://www.rmj.ru/> / - Russian Medical Journal