

МИНИСТЕРСТВО НАУКИ И ВЫСШЕГО ОБРАЗОВАНИЯ
РОССИЙСКОЙ ФЕДЕРАЦИИ
Федеральное государственное бюджетное
образовательное учреждение высшего образования
«Пензенский государственный университет» (ПГУ)

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АКАДЕМИЧЕСКАЯ ИСТОРИЯ БОЛЕЗНИ ХИРУРГИЧЕСКОГО БОЛЬНОГО

Учебно-методическое пособие

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ACADEMIC MEDICAL HISTORY OF A SURGICAL PATIENT

Methodical manual

Пенза
Издательство ПГУ
2019

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Ф43 Академическая история болезни хирургического
больного : учеб.-метод. пособие / Е. Г. Феоктистова, Н. В. Щен-
никова = Academic surgical patient history : methodical manual /
Е. G. Feoktistova, N. V. Shchennikova. – Пенза : Изд-во ПГУ,
2019. – 56 с.

Представлен алгоритм обследования хирургического пациента и
схема написания академической истории болезни, приведен конкретный
клинический случай заболевания, обозначены требования к оформлению
курсовой работы. Издание пособие полностью соответствует рабочим
программам дисциплин «Факультетская хирургия, урология» и «Госпи-
тальная хирургия, детская хирургия».

The teaching guide presents the algorithm of medical examination of
a surgical patient and the scheme of an academic patient history as well as
the real clinical case. The standards for a course paper are given. The guide
fully complies with the academic work programs on «Faculty Surgery,
Urology» and «Hospital Surgery, Pediatric Surgery».

The guide has been made at the Surgery Department and is intended
for students of 31.05.01 «General Medicine», 31.05.02 «Pediatrics».

УДК 617.55-001.31

*Рекомендовано к изданию методической комиссией
Медицинского института Пензенского государственного университета
(протокол № от 2019)*

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The day will come when we will
find ourselves unable to resist
the force of gravestone.
The day will come to answer the question: «What did you come for?»
And I will answer: «I was a doctor».
(Ara Reizis, 2016)

INTRODUCTION

Over the last few decades there have been considerable advances in the development of methods of laboratory diagnostics and instrumental diagnostics. Highly informative expensive examination methods (ultrasound examination, computer-aided tomography, nuclear magnetic resonance diagnostics) have been introduced. These methods have become standard medical services. But despite immense technological progress the professional thinking of the doctor remains a topical issue. A close intertwinement of the art of healing and science promotes successful management of a patient's disease. «But a difficult task of hearing a patient calls for the entire involvement of the doctor's intellect, intuition and professional knowledge. This is the first and the main diagnostic tool in the arsenal of the doctor» (Bernard Lawn, 1995).

The execution of a course paper helps develop a most important practical skill for a doctor of any specialization. Students managing patients develop clinical thinking and the art of work with patients.

Compiling the manual, the authors took into account current requirements of state educational standards. It systematizes the algorithm of work with a patient, gives recommendations on obtaining a case history and on the collection of complaints.

The authors consider a consistent and laborious physical examination of a patient crucial. It starts with the objective status and proceeds to all systems in order to detect aberrations. Details of the procedure are imperative for medical students to perfect their clinical thinking. The manual also contains a detailed differential diagnosis and a relevant examination and treatment plan.

This manual stands out as it provides not only recommendations for writing an academic medical history, but also a real clinical case, which considerably facilitates understanding the execution of some parts of a medical history.

The authors hope that this manual will help future doctors do any course or term paper and fill in medical histories of their future patients correctly.

GENERAL REQUIREMENTS FOR A COURSE PAPER

A course paper is an individual student training activity undertaken in the process of studying specific disciplines (in this case «Faculty Surgery, Urology» and «Hospital Surgery, Pediatric Surgery»), that is assessed by the instructor at the 100-point rating scale.

A course paper consists of 2 parts: practical and theoretical. The practical part involves diagnosing and treatment of a surgical patient during the period in hospital and writing an academic medical history. The theoretical part involves an essay on specified topics.

On the first or second day of «Faculty Surgery, Urology» and «Hospital Surgery, Pediatric Surgery» courses students are given a surgical patient for diagnosing and managing in compliance with the list of nosological diseases covered by the academic work program. A student is supposed to diagnose and manage a patient during hospitalization or until the end of the academic course (if the patient's period in hospital exceeds the period of studies of the course).

Writing an academic medical history finalizes the first part of a course paper. The course paper should follow an appropriate layout. It is supposed to be printed out on A4 format paper sheets. The final draft should be word-processed using 12–14 font size with 1.5 line spacing. Page numbers should be given.

An essay is the second part of a course paper. At the start of managing the patient the student gets a course paper assignment and the topic of an essay. The assignment is approved by the head of the department. The topic of an essay is given by the supervisor of the course paper from among the academic staff. The list of topics has been approved and registered in the teaching materials for the course.

To write an essay a student is supposed to analyze at least 5 monographs and articles on the topic of the given patient. It is recommended to use sources not older than 10 years, including textbooks and manuals by the instructors of the Surgery Department of the Medical Institute of Penza State University. The scope of the essay is 20 pages of printed text. It is to be printed out on A4 format paper sheets. The final draft should be word-processed using 12–14 font size with 1,5 line spacing. Page numbers should be given.

The table of contents is followed by the introduction. The introduction should not exceed 1,5–2 pages. The introduction is to contain statistical data on lethality and morbidity rates of the nosology as well as the significance of the topic and the level of analysis of the topic both in theory and practice.

The main part of the paper should present a range of opinions on etiology, pathogenesis, diagnostics and treatment of the disease. It is necessary to consider indications and contraindications for surgery, possible complications that can set in the process of treatment. Profound analysis of the topic covering its main aspects should be given.

The concluding part of the essay should focus on its major points and present main results.

Independent work of the student with literature is under assessment. Unverified data from the Internet is not assessed. Word-for-word copying of books and articles and borrowing ready essays from the Internet are not admissible.

The paper normally finishes with the list of references. For monographs it is necessary to indicate last name/names of the author/authors with initials, the title of the monograph, the place of publication, publishing house, year of publication.

For articles and collection of works or monographs it is necessary to indicate last name/names of the author/authors with initials, the title of the article, the title of journal or collection of works, year of publication, volume number, issue number, pages containing the article (the first and the last).

For Internet sources it is necessary to indicate the website address. The list of references is compiled in conformity with standard requirements of State Standard Specification «Bibliographic references» (ГОСТ Р 7.0.5–2008).

Appendices to the paper can contain illustrations, tables, schemes, graphs referred to in the paper.

THE NOTION OF A SURGICAL MEDICAL HISTORY AND AN ACADEMIC MEDICAL HISTORY (BRIEF HISTORICAL BACKGROUND)

A medical history is a systematized presentation of subjective and objective facts relevant to the medical condition of the patient in the past, present and future.

There are 2 kinds of medical history – academic and clinical.

A clinical history is the main document produced for every in-patient. In the Russian Federation there is a unified standard form of a medical history – an in-patient medical history (003/y-07form). This document is filled in by certified clinicians with a medical degree which enables them to give an objective description of the in-patient. The main attention is given to a detailed description of pathological findings. A clinical history is intended to record results of monitoring the patient's condition and to represent a diagnostic and treatment processes. It also has a scientific, practical and legal relevance.

A medical history contains the patient's complaints, antecedent anamnesis, information on earlier diseases, test results, diagnosis, reports of doctors, treatment methods and their results, causes and circumstances of death.

A comprehensive and detailed autopsy report is given to enable a consultant physician or an administration official to obtain an overview of the patient.

A medical history of the in-patient is an expert document that helps to assess the doctor's diagnostic and treatment work. In conflict situations it is the only document substantiating the relevance and timeliness of diagnostic and treatment activities in conformity with standards of diagnosing and treatment adopted by the Ministry of Health.

An academic medical history is a written expression of the student's clinic thinking. It differs from a clinical history in degree of comprehensiveness and depth of a case description as well as in number of sections. Given the fact that students don't have comprehensive knowledge and clinical experience yet, writing an academic medical history should be started with studying relevant literature and compiling an essay.

It is necessary for shaping the student's clinical thinking and a comprehensive picture of the development of pathological processes in the patient's organism and their clinical symptoms. The main goal is to cultivate skills of examining patients in strict order and according to a

special scheme dealing with the organism of the patient rather than just the disease.

A student medical history copies all sections of a medical card of an in-patient adopted by the Ministry of Health.

To write a medical history the student should be able to:

- identify the main and additional complaints of the patient;
- elicit the patient's anamnesis including professional and allergy anamneses;
- carry out an objective examination of the patient's systems;
- on the grounds of complaints, anamnesis and objective symptoms substantiate a provisional diagnosis and define an examination and treatment plan;
- analyze lab tests results, correlate them with the provisional diagnosis and changes in the clinical picture of the disease;
- carry out a differential diagnosis;
- complete epicrisis, give recommendations on rehabilitation and prevention measures after the discharge from hospital.

A medical history is a document that tests the ability of students to substantiate conclusions on the basis of all acquired knowledge and data about the patient (questioning, examination, an ambulance doctor's report, conversation with relatives or witnesses, etc.)

A medical history consists of the following main sections:

- 1) title page, passport data;
- 2) complaints;
- 3) anamnesis (a history of a given disease);
- 4) antecedent anamnesis (a life history);
- 5) objective current condition;
- 6) a provisional diagnosis and its substantiation;
- 7) examination plan;
- 8) lab results, results from instrumental methods and reports of specialists;
- 9) a differential diagnosis;
- 10) a clinical diagnosis and its substantiation;
- 11) a plan and methods of treatment and their substantiation;
- 12) pre-surgery epicrisis;
- 13) operative notes;
- 14) management journal;
- 15) prognosis;
- 16) prevention of the disease and its relapse;
- 17) epicrisis.

THE STRUCTURE OF AN ACADEMIC MEDICAL HISTORY

1. Passport data

This section of an academic medical history is standard and includes the following data:

1. Family name, first name, patronymic (the first letter of the family name is given).
2. Age.
3. Occupation.
3. Place of residence.
4. Date of hospitalization and date of discharge from a hospital.
5. Provisional diagnosis.
6. Clinical diagnosis:
 - basic;
 - complications;
 - related illnesses.
7. Name and date of a surgery.
8. Dates of beginning and end of treatment.

2. Complaints

This section includes complaints of the patient that made him see the doctor. During a conversation the student finds out the patient's complaints at the time of examination (which are more often absent as the patient is being treated and has already been operated) and at the time of hospitalization.

An academic medical history reflects complaints at the time of hospitalization and at the beginning of treatment.

While collecting complaints, the student politely asks the patient questions. A special skill is needed to find out all necessary peculiarities of the disease: know what questions to ask, know what should be given the main attention to and what aspects are better to miss.

If the patient avoids the main topic, it is necessary to tactfully redirect the conversation into the right track. The student is to ask leading and clarifying questions.

In the course of the conversation it is vital to actively determine complaints that can take place in this disease but the patient hasn't mentioned them for some reason. It is necessary to define complaints possible in this disease but absent in the patient.

First come the complaints that are connected with a particular system of the organism characterizing the primary disease followed by additional complaints. It is not enough to give the description of this or that sensation of the patient, it is necessary to itemize the character of these complaints.

For example, the patient is complaining of some pain. It is necessary to specify its location, how often it bothers him, what time of the day, in what position of the patient, its character (dull, nagging, stabbing, squeezing, tearing, acute, throbbing), its irradiation and duration (constant, intermittent, paroxysmal). It is necessary to find out triggering pain factors (some body position, certain movement, breathing, food intake, nervous condition).

It is necessary to put specific questions: if there is something that causes pain, if the patient noticed temperature rise, if the pain is accompanied by nausea and vomiting.

A scrupulous record of complaints allows an early differential diagnosis of various diseases.

Then it is necessary to find out general complaints: what symptoms appeared as the disease progressed. General complaints are weakness, physical ailments, fatiguability, weight loss, loss of appetite, sleep disruption, headache, decreased working capacity. This information allows to specify the character of disease and assess general condition of the patient. If the patient is unconscious, relatives can be the source of anamnesis.

Then it is necessary to find out complaints connected with malfunctioning organs. For a particular system of organs there are certain peculiarities and differences in functioning of an affected organ and system.

Theraputists give special attention to eliciting information on organ systems. A surgical medical history mainly reflects only pathological aberrations.

First of all, changes in the patient's general condition should be elicited:

1. General state: good, satisfactory, bad, when it worsened, what led to it, in the patient's opinion.
2. General weakness – how pronounced it is and how fast it sets in.
3. Fatiguability – how pronounced it is and how fast it sets in.
4. Working capacity: good, decreased, bad, lost, when it happened from the beginning of the disease.
5. Weight loss or gain – how pronounced it is and when it began.
6. Sweating – what time of the day it occurs, how intensive it is, what it is accompanied by and what precedes it.

7. Temperature rise – when it rises, if it is steady or periodical, if it is accompanied by sweating or chills, what medicines cut it off and for how long, how tolerable the fever is.

8. Skin itch – general or localized, when and why it appeared.

This should be followed by eliciting complaints on organ systems.

Musculoskeletal system

The patient may have the following complaints:

- swelling;
- change of skin color above the affected joint;
- deformity of joints;
- restricted mobility;
- joint stiffness (specify the timing and duration of the symptom);
- aching bones and muscles.

It is necessary to specify the pain localization, time and conditions of its appearance (constant, periodical, if it appears at rest or on certain activity, if it is related to weather conditions), character (localized, travelling or radiating to some other joint), pain relieving factors (certain posture of affected joints or medicine).

Respiratory system

It is necessary to specify the following:

- nasal breathing infringement, nasal discharge (character, quantity, smell, occurrence of nosebleeds);
- scratchy and dry throat;
- hoarse voice;
- cough (conditions and time of its appearance, postures leading to cough aggravation, character, accompanying factors; quantity of phlegm, its consistency, color, smell, blood admixture, dependence of phlegm production on the patient's posture);
- chest pain (localization, character, periodicity, duration, irradiation, conditions of its appearance; relation to breathing, posture change, cough);
- dyspnea (conditions of its appearance, intensity, duration, accompanying factors, relieving factors, relation to activity and its intensity);
- apnea attacks (time of appearance, duration, postures leading to partial and full relief).

Cardiovascular system

The patient may have the following complaints:

- heart pain (localization, causes and conditions of its appearance character, intensity, duration, irradiation, accompanying factors, conditions leading to partial and full relief, the patient's behavior during a pain attack, previous attacks, changes of pain character. If the patient takes nitrate, the following should be specified: number of pills, how soon relief occurred, difference from previous pain attacks);
- tachycardia (conditions of its onset, intensity, duration, constant or periodical, accompanying factors and relieving factors);
- disruption in heart rate (conditions and frequency of its appearance, duration, relieving factors);
- dyspnea and apnea attacks (these can be symptoms of both respiratory and cardiovascular diseases);
- edemas (localization, degree of intensity, duration and time of their onset).

Digestive system

One of the symptoms of the disease can be a change in appetite (increased, unchanged, decreased, aversion to certain foods). Besides, the following should be specified:

- satiety (how soon appears, food quantity leading to it, accompanying factors);
- thirst (degree of intensity, quantity of liquids per day, dry mouth);
- salivation (time of its occurrence, when it increases);
- taste changes;
- disruption of chewing;
- disruption of swallowing (dysphagia – conditions of occurrence, what foods cause it, accompanying factors);
- eructation (accompanying factors, frequency and time of occurrence, duration, relation to food intake and certain foods);
- pyrosis (intensity, duration, frequency of occurrence, relation to food intake; factors leading to partial and full relief);
- nausea (frequency of occurrence, duration, relation to food intake and certain foods, accompanying factors, relation to postures);
- vomiting (conditions of occurrence, accompanying factors, vomit quantity and character, smell, if vomit brings relief or not);

- abdominal pain (localization, irradiation, character, duration, intensity; relation to food intake, activity, emotional state and acts of defecation; medicine leading to partial and full relief);
- feeling bloated (conditions of occurrence, relief factors);
- stomach rumbling (conditions of occurrence, relief factors);
- changes in stool (character, need to push, form and color of stool, frequency per day/week, presence of pathological admixtures).

Urinary system

Kidney diseases can be accompanied by the following:

- abdominal and lumbar spine pain (localization, character, intensity, irradiation, factors accompanying pain syndrome, relief factors);
- urination disruption (frequency per day, urine color, presence of blood admixtures);
- pain on urination.

Nervous system

When questioning the patient, the focus should be on the following:

- sleep (normal, insomnia, troubled, dreaming, nightmares, drowsiness by day);
- mood (stable, calm, unsteady, excited, suppressed, irritability, quick temper);
- sociability (relationships in family and at work, difficulties in communication);
- headaches (localization, character, intensity, duration, cause, triggering and aggravating factors, accompanying factors);
- dizziness (conditions of occurrence, duration, intensity).

Sense organs

When questioning the patient, the focus should be on the following:

- eyesight (normal, decreased, myopia, hyperopia);
- hearing (normal, decreased, degree of decrease, tinnitus, discharge from ears);
- sense of smell (normal, decreased, acute, absent);
- taste (normal or absent, taste perversion).

3. Disease history (Anamnesis morbi)

This section chronologically describes the appearance and development of the disease from its first signs to the moment of the patient's medical examination by the doctor. The term disease means the basic surgical (a morbid condition that has led to hospitalization). If there are other competing diseases present, two anamneses are produced.

Competing diseases are those that don't have common etiology and treatment with the primary disease, yet need urgent treatment.

Concomitant disease is a disease, that doesn't have common etiology and pathogenesis with the primary disease, but can affect the course of that disease and sometimes needs treatment itself.

The doctor should get the picture of the disease as a result of questioning the patient and his relatives, and the data analysis of medical documents (extracts from the previous medical histories, the outpatient's medical record).

It is necessary to record the course and development of the disease from its start to the moment of the patient's medical examination by the doctor. The symptoms are to be described chronologically. The causes of the disease and the changes in its course should be indicated. There must be records about previous inpatient and outpatient treatment, its duration and results. When describing acute surgical states and traumas the date and the time of the start of the disease or getting injured should be indicated.

The following should also be mentioned: circumstances of the start of the disease, its first signs, the dynamics of its initial symptoms, exacerbation peculiarities, duration of remission, complications, previous treatment and its results, previous diagnostic procedures and their results, changes in the patient's work capacity.

The following scheme should be followed:

1. How long has the patient considered himself sick?
2. When and in what circumstances did the disease first declare itself?
3. What signs (symptoms or syndromes) did the disease start with?
4. When and where did the first visit to the doctor take place? What were the results of the then tests? What was the diagnosis and the received course of treatment?
5. Subsequent course of the disease:
 - a) the dynamics of its initial symptoms, setting in new symptoms;
 - б) frequency of exacerbation, duration of remission, complications;
 - в) previous hospitalization related to the disease;

г) results of the diagnostic studies (blood tests, urine analysis, electrocardiogram (ECG), roentgenogram);

д) treatment activities (medications, surgeries, physiotherapy, sanatorium-and-spa treatment), treatment efficiency.

6. When did the patient's condition deteriorate and what led to it? What are the results of the treatment activities and examination?

7. How did the patient's condition change in hospital before the start of treatment?

4. Life history (Anamnesis vitae)

In collecting the patient's life history the following brief biographical information is stated:

- time and place of birth, what family he was born into, what number child;

- how he grew and developed;

- education;

- military status, participation in hostilities (state reasons if he was released or demobilized);

- occupation;

- permanent place of residence.

Secondly, the following is chronologically stated: past medical history, traumas, surgeries, injuries with information on the age of the patient, duration and seriousness of the disease, complications and received treatment. Special attention is given to related chronic diseases (coronary heart disease, diabetes, hypertension, chronic obstructive pulmonary disease, etc.). Presence or absence of earlier infectious diseases (tuberculosis, hepatitis, venereal diseases) is elicited. Special attention is also given to earlier serious diseases (myocardial infarction, cerebrovascular disease, pneumonia, etc.)

Thirdly, harmful habits are obligatorily stated: smoking (since what age, how many cigarettes per day), alcohol abuse (since what age, how much per day), drug abuse (name of narcotic drugs, since what age).

Fourthly, a family anamnesis should be presented: marital status, family composition.

Fifthly, a gynecological and obstetrical anamnesis should be presented for women patients: menarche age, menstruation periodicity, duration, discharge quantity; age of marriage, pregnancies, childbirths and abortions (spontaneous and induced), their terms, number, outcomes, complications; climax and its course, the date of the last menstruation

(to define the time for a planned surgery, as planned surgeries are inadvisable during menstruation because of disorders in the coagulative blood system).

Then comes a hereditary anamnesis: parents, siblings, children (health condition, diseases); causes of death of immediate family members (at what age); burdened family history; malignant neoplasms of immediate family members.

Lately special attention has been given to an insurance anamnesis: how long the patient is on sick-leave because of temporary disability; having a disability and its cause, group of disability, what disease caused disability, since what time.

A social anamnesis includes the following: occupation, at what age, when and where started to work; further labor activities in a chronological order indicating places of work, positions and posts; working conditions (night shifts, lengthy static tension, physical and psychological tension, temperature at work, etc.); occupational hazards indicating duration of exposure (toxic chemicals, dust, ionizing radiation and other factors; professional contacts of the patient). Living conditions, sanitary conditions, diet and staying in environmentally disadvantaged zones are outlined.

Finally, an allergy anamnesis is collected: intolerance to foods, drugs, medications, vaccines, serums is specified indicating morbidities at their intake (fever, rash, bronchospasm, anaphylactic shock, etc.); various allergic reactions indicating their seasonality and/or relation to other external factors. It is necessary to specify if the patient has received blood transfusions and the patient's reactions to the transfuses; if the patient has received parenteral medications over the last 6 months.

5. Objective examination of the patient (Status praesens objectivus)

The examination is conducted by students at the patient's bed. Only medical terminology is used while describing the patient's condition. The description of the patient's condition is conducted following the order: general examination, respiratory system, circulatory system, digestive system, urinary system, nervous system, endocrine system. Then comes the patient's surgical status and specific local alterations following the order: inspection, palpation, percussion, auscultation.

Every section describing organ systems should be entitled. Identified alterations should be described without diagnostical terminology. For example, it is not appropriate to write: «there are manifestations of atopic

dermatitis on the skin» or «there are rachitic deformations» and the like. The description of these manifestations should be given instead, for example, «the skin on the cheeks has localized redness, dryness and peeling» or «the patient has an X-deformation of lower limbs». In order to describe alterations in organs and systems, it is necessary to know physical examination methods and the examination algorithm that involves inspection, palpation, percussion, auscultation.

The inspection (inspectio) is intended to determine:

1. The patient's status (good, fair, serious and critical). It is necessary to describe major syndromes determining the patient's status. The doctor gets the full picture of the patient's condition only to the end of the inspection stage.

2. Consciousness: verbal contact with the patient, awareness of own identity, time and place. Consciousness may be clear, confused or absent. There are 3 degrees of consciousness disorder: stupor, sopor, coma (in its turn, coma can be of 1–4 degrees).

3. The patient's posture (active, passive, forced).

4. The patient's face expression (agitated, sad, indifferent, suffering, masklike).

5. The body temperature. A healthy person has body temperature ranging from 36,4 °C to 36,9 °C.

6. Constitution (normosthenic, asthenic, hypersthenic). Anthropometric indicators: body weight, height, body mass index).

7. Skin and mucous membrane. The attention is paid to color, moisture, elasticity, hair coat condition, rash, hemorrhage, vascular alterations, scars, etc. Alterations in skin color and visible mucous membranes can be the following: pale, hyperemic, with cyanosis, icteric, and brown (bronze) of various shades. It is necessary to indicate the location of these color alterations. Moisture can be normal, increased, decreased; dryness, peeling. Describing scars their size and localization are indicated. Then come rash kinds and skin damage: erythema, spot, roseola, papule, pustule, blister, node, vesicle, bubble, furuncle, carbuncle, erosion, ulcer, bedsore. Nail condition is also specified (watch-glass symptom, koilonychia, thimble sign, onycholysis, dotted hemorrhage). Skin turgor is also assessed (normal, increased, decreased).

8. Subcutaneous fat layer, the degree of development of subcutaneous tissue (excessive, moderate, weak), thickness of skin fold (cm). The standard places of determining thickness of skin fold are triceps muscle area, biceps muscle area, intrascapular region, lateral surface of the chest, above iliac crest, mid-femur area, calf muscle area, the abdomen. Swelling: localization, density. Subcutaneous emphysema.

9. Lymph nodes. Submaxillary, axillary, inguinal lymph nodes can be palpated in a normal condition. The size, consistency, form, morbidity, mobility and cohesion with one another and surrounding tissues are assessed as well as skin condition above lymph nodes. Here can be 2 types of alterations in lymph nodes:

a) general (systemic damage to lymph nodes), stipulated by inflammatory causes and tumor newgrowth in some blood diseases;

б) local enlargement of regional lymph nodes of inflammatory (local suppurative processes) or neoplastic character (cancer metastases).

10. Muscularskeletal system:

a) muscles. The degree of development of body skeletal musculature (good, fair, atrophy), muscle tone, morbidity at palpation, asymmetry, contractures are assessed;

б) bones. The form of bones, deformities, morbidity at palpation and percussion are determined. Posture and spinal deformation (kyphosis, lordosis, scoliosis) are assessed. The peculiarities of gait are stated;

в) joints. Configuration, swelling, morbidity at palpation and movements, range of active and passive movements in joints, skin alterations and hypodermic tissue in the area of joints are specified.

Respiratory system

Inspection.

Alterations in nose breathing and exterior nose deformations are assessed first. Then comes voice alterations and chest inspection that includes the specification of its form (normosthenic, asthenic, hypersthenic, emphysematous, kyphoscoliotic), its symmetry, chest circumference. Then comes breath characteristic: breathing type (abdominal, costal or mixed) and chest symmetry at breathing. The number of respiratory movements of chest and abdominal wall per minute is determined together with rhythmicity of respiratory movements. Breath depth is determined by the activity of respiratory musculature involved in breathing and by the involvement of additional respiratory musculature. The presence of dyspnea (expiratory, inspiratory, mixed) is stated.

Chest palpation.

Morbidity, elasticity and vocal tremor are determined. Palpation is produced with 2 hands, simultaneously placing fingers of both hands on the symmetrical chest areas and detecting changes in morbidity at the height of inhalation, exhalation and body bending to the affected and healthy side. At vocal tremor assessment unilateral or bilateral weakening or strengthening is detected indicating the location of alterations.

Lungs percussion.

Comparative percussion is intended to determine the nature of pathological alterations in lungs and pleural cavity. Pulmonary resonance can be clear or dull (infiltration of lung tissue, fluid in pleural cavity, fibrothorax), dull with a tympanic tinge (initial stage of inflammation, compression atelectasis), tympanic (pneumothorax, a lung cavity connected with bronchus) and vesiculotympanic (emphysema).

Topographic percussion is intended to determine the upper and the lower lungs border, width of Kronig isthmus, as well as mobility of the lower edge of the lung.

Auscultation.

In the process of auscultation, it is necessary to assess major breath sounds, side (additional) breath sounds and bronchophony. There are major variants of breath sounds: vesicular, laryngotracheal and their derivative (hard, bronchovesicular, tracheal, cogged-wheel and amphoric). In case of weakened or absent vesicular breathing, the localization of alterations is indicated. While assessing side breath sounds, dry and moist rales are detected indicating their caliber, crepitation, pleural friction rub. Lungs auscultation is completed with the inspection of bronchophony (weakening or strengthening) and its symmetry.

Cardiovascular system

Inspection.

Cardiac hump, artery pulsation, jugular fossa pulsation and epigastric pulsation are detected at inspection. Forced posture of the patient, cyanosis, paleness, mottled skin, edema, cervical veins swelling, positive venous pulse, artery tortuosity, carotid shudder are stated.

Palpation.

On pericardial palpation apical thrust is palpated first (its localization, force, area, direction (protruding, retractive)) followed by great vessels (aorta). Apical thrust and epigastric pulsation can be detected in patients of asthenic bodybuild. Cervical veins pulsation is examined at rest and at Plesch probe (cervical veins swelling at pressure).

Radial artery pulse is measured. Its synchronicity in both arms, rate, rhythm, filling, tension. Jackson's symptom is stated.

Percussion.

Borders of relative heart dullness (right, left, upper) are determined, heart diameter is measured, borders of vascular fascicles and configuration of heart (normal, mitral, aortic) are determined. Then borders of absolute heart dullness (right, left, upper) are determined.

Auscultation.

All five pulmonary areas are involved. Auscultation begins with identifying major and additional heart sounds. Alterations in loudness of major heart sounds are specified (I and II), splitting of heart sounds, presence of additional heart sounds (III and IV), mitral click, additional systolic click and pericardium sound. Cardiac murmur: localization, relation to cardiac cycle phases, loudness, nature, timbre, duration, direction. Extracardiac murmur (pericardial rub, pleuropericardial friction rub). Then comes vascular auscultation. Nun's murmur, Vinogradov-Durozier symptom, stenotic artery sound, Sirotinin-Kukoverov symptom are identified. Finally, blood pressure on both arms is taken (millimeters of mercury).

Digestive system

Inspection.

Oral cavity examination. Tongue (color, size, tongue plague and its color, dryness, papillary layer condition (can be polished, geographical), local alterations – sores, aphthae, scars, hemorrhage). Mucous tunic of the mouth (color, hemorrhage, sores, scars, aphthae). Presence of decaying teeth. Gingivae (edematic, bleeding).

Abdomen examination. Its form, presence of even or uneven protrusions or retractions (for example, naval protrusion at increased abdominal pressure or umbilical ring hernia), scars, striae on the anterior abdominal wall, dilatation and tortuosity of saphenous veins, hernial areas, increased visible movements of intestine and involvement of abdomen into breathing are described.

Percussion of abdomen.

Free gas (disappearance of hepatic dullness), free fluid (dullness in flat abdomen that changes its borders with changes of posture) or encapsulated fluid in abdominal cavity (dullness with unchanging borders) are identified. Also, borders and sizes of some organs of abdominal cavity are identified.

Percussion sound can be tympanic, dull tympanic, and dull.

Palpation of abdomen.

Superficial palpation is followed by deep sliding palpation. Superficial palpation is intended to identify:

- a) local and general rigidity of abdominal muscles;
- b) local and general morbidity of anterior abdominal wall, Blumberg's sign;
- c) divergence of rectus abdominis muscles, white line hernias, umbilical ring hernias, inguinal and crural hernias;

- d) significant enlargement of abdominal organs, surface tumors;
- e) fluctuation.

According to V. P. Obraztsov and N. D. Strazhesko, deep sliding palpation is intended to identify location, sizes, mobility, consistency, morbidity of large intestine, stomach, and pylorus. Then pancreas gland is palpated and its tender points are examined.

Auscultation of abdomen.

Auscultation is intended to identify peristaltic sounds with the help of phonendoscope. It is necessary to detect vascular sounds and the concurrence of increased peristaltic sounds and increased pain.

Liver and biliary tracts

Inspection.

Inspecting right subcostal area, attention should be given to protrusions and deformations in liver area.

Percussion.

The upper and lower borders of absolute liver flatness (according to M. G. Kurlov's method or V. P. Obraztsov's method) and relative liver flatness (real upper border) are determined.

Palpation.

The lower border of liver, its consistency, morbidity, surface texture of the organ and its lower edge are specified. At palpation of cholecystitis its size and morbidity are identified (in the normal condition cholecystitis is not palpated).

Spleen

Inspection.

Inspecting left subcostal area and left side area attention should be given to protrusions and deformations in spleen area.

Percussion.

Size, length and breadth of spleen are determined.

Palpation.

Sizes, consistency alterations, surface texture of the organ, palpatory tenderness are identified. In the normal condition spleen is not palpated.

Urinary track system

Inspection.

Inspecting kidney area, the following should be specified: skin color change, protrusions, edemas.

Palpation.

Kidneys are palpated in prone position and in vertical position. Palpatory tenderness in kidney area, ureter, costovertebral and costodorsolumbar points.

Percussion.

It is produced in vertical position of the patient. Morbidity at percussion of lumbar region is detected. The upper border of urinary bladder is identified (with full urinary bladder).

Endocrine system

Sings of impaired growth (giantism and dwarfism) and eating disorders are detected (hypotrophy, paratrophia, obesity, emaciation). Skin cover color, hyperpigmentation of skin and impaired hair growth are stated. Moon face. Enlargement of tongue, wrists, feet.

Secondary sexual characteristics: intensity, concordance with age.

Thyroid body: size, morbidity, consistency, Grefe's, Kokher's Mari's, Mebius's ocular symptoms, etc.

Nervous system

Conscience, speech, reading, writing. Sensitivity, locations of sensitivity disorders. Kinetic sphere: gait, paresis, limb paralyses. Coordination of movements. Reflexes (pharyngeal, abdominal, tendon and periosteal: elbow jerk, knee jerk, Achille's jerk). Meningeal symptoms: stiff neck, Kernig's symptom, Brudzinsky's upper, medium, and lower symptom. Dermographism (duration of latent and manifestative period (obstinate, fugative), appearance (red, pink, white; isolated, disseminated, protrusive).

Visual organs (size and form of pupils, pupillary light reflex, accommodation and convergence, vision acuity, heterophtalmia, nystagmus).

Hearing, vestibular apparatus. In conversation the patient's hearing is examined by whisper speech and conversational speech. Vestibular apparatus is examined by means of Romberg maneuver and pointing test. Romberg maneuver is produced in the upright position, with arms forward and fingers spread. The examinee stands for some time with open eyes, then his balance is assessed without eye control over his steadiness, for this he is asked to close his eyes. Pointing test expects the examinee to put his pointing finger on the tip of the nose (with open eyes, then with closed eyes).

Surgical status and local alterations (Status localis)

This section is added to a surgical history. Surgical status and local alterations are important for describing surgical diseases, as in surgery there are frequent injuries, sores, tumors and other malconditions with local manifestations.

Assessment of local alterations is important for defining further treatment tactics. This section gives detailed description of local manifestations of the disease or trauma.

In an academic medical history, it is advisable to record local alterations at the time of hospitalization (they can be written out from the past medical history) and local alterations at the start of treatment. In case they are the same, the data may not be doubled.

Describing surgical status and local alterations it is necessary to stick to the standard scheme: inspection, palpation, percussion, auscultation.

At inspection of abnormalities it is necessary to assess the nature of morbid process (inflation, injury, protrusion, newgrowth, deformity, ulcer), its localization, sizes, skin cover color in this area and intensity of vascular pattern. In case of impaired skin (injury, ulcer) it is necessary to assess the edges, form and depth of the defect, size, appearance and quality of discharge. If a pathologic process or injury is located in the joint area it is necessary to assess active range of motion. It is necessary to emphasize the importance of inspection of symmetrical body areas (both limbs) to compare the affected and intact areas.

At palpation it is necessary to determine morbidity, local temperature, type of boundaries between the affected tissue and sound tissue, investigate pulsation of magistral arteries and regional lymph nodes. It is important to find out the passive range of movements.

Inspecting the morbid area, it is also necessary to assess its texture (soft-elastic, solid-elastic, stone-like density), motility in relation to skin and adjacent tissues, surface (even, uneven) and detect fluctuation.

At percussion it is necessary to determine the nature of percussion sound above the affected area (dullness, tympanic resonance), specific symptoms are determined.

Auscultation is intended to identify vascular sounds in the affected area and some specific symptoms (defining laxation, conduction of heart tones, weakening of vesicular murmur, capotement, etc.).

All research methods are aimed to arrive at a provisional diagnosis, i.e. determine the patient's disease.

6. Provisional diagnosis

A provisional diagnosis is made on the basis of the patient's complaints, disease history, life history and physical examination. The leading syndrome is singled out, the diseases are determined in relation to which differential diagnostics is conducted. Then a provisional diagnosis is made. The wording of a provisional diagnosis should be full according to modern classification with indication of nosology, form and severity, stage, phase, etc. It is necessary to specify complications of the primary disease, concurrent and intercurrent diseases.

A true provisional diagnosis at primary inspection is a prerequisite of timely and efficient treatment.

7. Patient's examination plan

To make up the patient's examination plan the student should follow clinical recommendations of Russian non-governmental organization "Russian Surgeon Society" or recommendations of textbooks and manuals written by teaching staff of Surgery Department. The scope of ancillary tests is defined in every particular diagnostic situation.

The patient's examination plan consists of the following:

1. Obligatory tests for all patients.
2. Ancillary tests for differential diagnostics and diagnosis specification.
3. Specialized medical consultations (ophtalmologist, urinologist, etc.).

Obligatory tests include:

- clinical blood analysis;
- clinical urine analysis;
- clinical feces analysis;
- biochemical blood analysis (total protein, sugar, cholesterol, bilirubin, creatinine, blood urea);
- Wasserman reaction;
- electrocardiogram;
- radiological exploration of chest organs (fluorography or plan radiography of chest organs).

The scope of **ancillary tests** is defined individually depending on nosology of a disease and individual peculiarities of the disease course. For patients who are going to be operated in hospital the following tests are made: blood group, rhesus blood factor, some haemocoagulative

parameters, international normalized ratio (INR), prothrombotic index, partial thromboplastin, fibrinogen.

In case of complicated diagnostic situations, follow-up control tests should be made.

Specialized medical consultations are conducted to exclude or confirm certain diagnostic suppositions.

8. The patient's laboratory data and instrumental examination data

Laboratory data are written out (not photographed!!!) from the clinical medical history in the chronological order indicating tests dates. Normal values are given beside the patient's data, measurement units should be given.

Clinical analysis data are given first (blood, urine, feces, coprogram, etc.). Then comes biochemical blood analysis data.

Medical reports are given at functional, radiological, instrumental tests, centesis and autopsy in vivo.

Medical reports of specialists come last: therapist, cardiologist, oto-rhyno-laryngologist, neuropathist, dental practitioner, etc. (only medical reports are written down).

The given data should be compared with normal values, the report should present a conclusion on normality or deviations from normal values.

Finally, this section presents a generalized conclusion on ancillary tests on the basis of malconditions, which should be taken into account while arriving at the final diagnosis.

If any planned tests were not conducted, the reason for it should be specified.

9. Differential diagnostics of the patient

The student begins with characterization of the disease under differential diagnostics. Then the student states the list of diseases and malconditions requiring differential diagnostics. It is reasonable to single out 3–4 diseases having similar syndromes and symptoms, that are found in the patient.

It is necessary to single out similarities and differences between the patient's disease and the disease against which differential diagnostics is conducted. It is necessary to give explanation for ruling out the disease.

The patient's complaints and the history of the disease are analyzed in detail, only after that laboratory data and instrumental tests results are analyzed.

If a symptom or tests data do not conform with the classical scheme of the disease, it is necessary to try to explain their origin.

10. Clinical diagnosis and its substantiation

A clinical diagnosis is made on the basis of the patient's complaints, disease history, life history, physical examination and interpretation of ancillary tests data. A clinical diagnosis is formulated in accordance with International Classification of Diseases, 10th Edition (ICD-10-CM).

First the primary disease is identified. It is a disease with which the patient got to hospital; in fatal case it is a disease which caused death.

Then primary disease complications are stated. These are consequences of the primary disease development. If there are no complications, it should be stated as well.

Comorbidities are necessarily mentioned. These are diseases having no common causation and pathogenesis with the primary disease, able to affect the disease development. They sometimes need treatment.

Some patients have concurrent diseases, having no common causation and treatment with the primary disease and wanting urgent treatment.

Surgical patient's clinical diagnosis and complications can be identified after operative therapy. In this case intraoperative picture should be specified.

11. Treatment plan and methods

On the basis of the clinical diagnosis, available research and clinical recommendations, the student is expected to choose the most rational treatment option for the patient.

Assigning only conservative therapy to the patient, the student is supposed to specify medication groups, frontline therapy, dosage, duration of treatment and the necessity for laboratory control. Also, the student is supposed to specify a diet, regimen and physical therapy.

Assigning operative therapy to the patient, the student is supposed to substantiate surgical alternative, counterindications if any and anticipated extent of operation. There are life indications (absolute) and relative indications for an operation. Presenting indications for an operation, it is

necessary to specify it as life-saving, urgent, or planned. According to the nature of surgical interference, surgeries are classified into remedial (radical, palliative, symptomatic) and diagnostic.

Substantiating operative therapy of the patient, the student is supposed to specify preoperative and postoperative therapy.

12. Preoperational epicrisis

If the surgical patient's treatment presupposes only conservative therapy, this section is not filled in.

Preoperational epicrisis should include the following information:

- surname, name, patronymic (the first letter of the surname), age;
- hospitalization (urgent, planned), hospitalization date;
- primary disease, stages of its development, clinical signs and their intensity;
- examination data, including laboratory and instrumental data;
- character and intensity of co-morbidities;
- in case of preoperational conservative activities, it is necessary to specify their order, kinds and effectiveness;
- substantiation of operative therapy, assessment of counterindications, surgical risk and anesthetic risk of the operation;
- planned extent of the operation.

Writing preoperational epicrisis the student should laconically substantiate the necessity of operative therapy, present indications for the operation, state possible complications in the course of the operation, and choose the optimal anaesthesia method.

It is necessary to particularize indications for the surgery (absolute, relative), to identify its aim (diagnostic, remedial), specify its character (radical, palliative), state its extent.

Preoperational epicrisis finishes with words «the patient's voluntary informed consent for the operation is obtained» and the patient's signature (the patient's signature is not required in an academic medical history).

13. Surgical record

This section of an academic medical history is copied from the clinical medical history and includes the following:

- date of surgery, its beginning and end;
- its name;

- anaesthesia method;
- position of the patient on the surgical table;
- method of surgical area treatment;
- surgical access (area of surgical incision, its size, direction, layers of dissected tissues);
- description of abnormalities revealed in surgery;
- intraoperative diagnosis.

A detailed description of the operation procedure is copied from the clinical medical history. Number of drainage tubes and their location are specified. Termination of the surgery (type of stitches, dressing). Description of exsomatized gross specimen.

14. Observation diaries

They are kept daily throughout the patient's treatment.

They contain information about all changes in the course of the disease, tests data and treatment corrections. They contain brief assessment of the dynamics of the patient's condition following the same order of organs and systems as at primary inspection.

Most attention should be given to the description of the organs and systems, that are affected or can be affected in the pathologic process. Every more or less significant symptom should be observed in dynamics from beginning to end. Diaries should not be identical; they should reflect the dynamics of the patient's condition.

The following activities are made daily: pulse rate and blood pressure are taken, auscultation of heart and lungs is made, abdomen palpation is made, bowel functioning (gases, stool) and urination are assessed. Special attention should be given to the condition of the surgical wound. It should be specified how the wound is healing (by primary or secondary intention, atonic), what wound fluid is present (quantity and type), if there are signs of complications of the wound. It is also necessary to indicate on what day after the surgery the stitches were removed. If the patient has a drainage system, its location is indicated as well as quantity and nature of discharge. The condition of dressing is described.

15. Prognosis

The student is supposed to make an inference about the possibility of health resumption, working capacity and life quality on the basis of course books and methodical literature. Sometimes it is necessary to make a short-term and long-term prognosis using the wording: good, guarded, bad.

16. Prevention of contraction and relapse of the disease

This section includes activities aimed at prevention of contraction and relapse of the disease. It can be omitted at some nosological entities (e.g., at traumas, appendicitis).

17. Epicrisis

Epicrisis is a summary of an academic medical history. Discharge epicrisis is made at the end of the patient's treatment in hospital. If the patient continues hospital treatment, the students should fill in interim epicrisis specifying the patient's further treatment plan.

Interim epicrisis starts with the hospitalization date and term of hospitalization as well as the patient's complaints at the moment of hospitalization. Then comes brief disease history prior to hospitalization. If there are some aspects in the life history that influenced the contraction and the course of the disease, they are to be specified here too. Then comes a detailed clinical diagnosis specifying the form of the disease, its stage, degree, complications of the primary disease, co-morbidities and concurrent diseases if any.

A clinical diagnosis is based on the complaints, disease history, laboratory tests, instrumental and morphological examinations. The necessity of surgery is substantiated specifying the date of the surgery and its nature. Peculiarities of postoperative therapy and its complications are singled out. The time of drainage removal and stitches removal is indicated as well as the character of wound intention.

It is necessary to state in detail conducted conservative therapy with medication groups, names of medicines, their dosage, and duration of intake. Physical therapy methods are also stated here. At the end of epicrisis recommendations for further treatment and rehabilitation are given: diet, labor regime, necessity of conservative therapy, specialized medical monitoring, sanatorium-and-spa treatment. Measures on disease progression prevention and its relapse are recommended. The time for an outpatient visit to the doctor is indicated.

EXAMPLE OF AN ACADEMIC MEDICAL HISTORY

The example of an academic medical history is given below:

THE MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE
RUSSIAN FEDERATION

Penza State University
Surgery Department

Course Paper
in the subject «Faculty Surgery, Urology»
on the topic «Acute phlegmonous appendicitis»

Specialty – 31.05.01 General Medicine

Student: _____ I. I. Ivanov

Group: 18JJI1

Supervisor: _____

(supervisor's academic degree,
pedagogical position, name, surname)

Mark _____

Date of presentation _____

2019

Course paper content

Part 1. Academic medical history

1. Passport data.....
2. Complaints at the time of examination and
at the time of hospitalization.....
3. Disease history.....
4. Life history.....
5. Objective inspection of the patient.....
6. Provisional diagnosis.....
7. The patient`s examination plan.....
8. The patient`s laboratory data and instrumental
examination data
9. Differential diagnostics of the patient.....
10. Clinical diagnosis and its substantiation.....
11. Treatment plan and methods.....
12. Preoperational epicrisis.....
13. Surgical record.....
14. Observation diaries
15. Prognosis.....
16. Prevention of contraction and relapse of the disease.....
17. Epicrisis.....

Часть 2. Essay

- Introduction.....
- Main body.....
- Conclusion
- Reference list.....

I. Passport data

1. Family name, first name, patronymic – K. Maria Ivanovna.
2. Age – 41.
3. Occupation – nurse.
3. Place of residence – Penza.
4. Date of hospitalization and date of discharge from a hospital – 01.10.2018 (5.00) – 05.10.2018.
5. Provisional diagnosis – acute appendicitis.
6. Clinical diagnosis – phlegmonous appendicitis, complicated by seroplastic peritonitis.
7. Name and date of a surgery – lap appendicectomy, abdominal drains, 01.10.2018.
8. Dates of beginning and end of treatment – 02.10.2018 – 05.10.2018.

II. Complaints

At hospitalization the patient complained about acute pain in the right iliac region, sickness, temperature rise up to 38,3 °C.

At the beginning of treatment the patient complained about pain in surgical wound region and general weakness.

III. Disease history (Anamnesis morbi)

The patient has been considering herself sick since 30.09.2018 (4.00), when she woke up because of nagging pain in upper abdomen and fits of sickness. There was a single-shot vomit, that brought no relief. During the day the pain syndrome didn't subside and increased while walking. By the afternoon she noticed that the pain in upper abdomen had faded and appeared in the right iliac region. In the evening 30.09.2018 temperature rose up to 38,3 °C.

She took 1 No-Spa at 9 a.m. that brought temporary pain relief.

At 4.30 an ambulance was called, and the patient was taken to Burdenko Penza Regional Hospital with the directional diagnosis «acute appendicitis».

IV. Life history (Anamnesis vitae)

She was born in 1977 in Penza. She was the first child in a two-parent family. She grew up and developed normally to age. Since graduation from

the secondary medical school she has been working as nurse in the medical ward. She has never left Penza region.

Past medical history: acute respiratory viral infection and acute respiratory disease – not often, seasonally. No chronic illnesses. No traumas or surgeries. Has never been sick with tuberculosis, hepatitis, sexually transmitted diseases. No harmful habits.

Family anamnesis. Married, one 8-year-old child.

Gynecological anamnesis. Menarche age 14. One pregnancy, one delivery. Last menstruation 20.09.2018.

Hereditary anamnesis burdened. Father had myocardial infarction at 56. Mother is suffering from gallstone disease.

Insurance anamnesis. No disability status.

Social anamnesis. She works as nurse in the medical ward, with night shifts in the work schedule; is in contact with toxic chemicals (antimicrobial drugs). Living conditions and sanitary conditions are good. Regular food intake. She denies periods of stay in environmentally unfriendly zones.

Allergy anamnesis is not burdened. There have been no blood transfusions.

V. Objective examination of the patient (Status praesens objectivus)

Inspection

The patient's status is fair. Consciousness is clear. The posture is active; she is walking limiting movements in surgical wound region. The patient's face expression is calm, doesn't show the signs of pain syndrome. The body temperature is 36,7 °C. The constitution is normosthenic. Body weight: 62 kg, height: 168 cm, body mass index $62 : 1,682 = 21,97 \text{ кг/м}^2$.

The skin is clean, of usual color and normal moisture; tissue tone is preserved, elasticity is moderate. Hemorrhages, ulcers, telangiectasia, and rash are absent. Hair and nails are not altered, adult woman pattern of hair distribution. Visible mucous membranes are pink, clean, wet. Subcutaneous fat layer is moderate. The thickness of skin fold in the region of angle of scapula is 1,5 cm. No visible swelling.

Lymph nodes (submaxillary, axillary, inguinal) are palpated as roundish in form (1×1,5 cm), soft, mobile, painless; there is no cohesion with one another or surrounding tissues. Skin above them is unaltered. Occipital, parotic, cervical, supraclavicular, subclavicular, cubital, popliteal lymph nodes are not palpated.

Muscularskeletal system

The muscles are developed. The muscle tone is preserved, symmetric, palpation is painless; indurations, contractures, or asymmetry of individual muscle group have not been detected.

The bones are not deformed, painless on palpation and percussion. The condition of nail bones is normal. The joints are not deconfigured. They are symmetrical, not swollen, painless on palpation, not hyperemic; the range of active and passive movements in joints is preserved; they are painless when moving; no crepitus or fluctuation. The posture is upright, the gait is within normal.

Respiratory system

Inspection. The nose is not deformed. Nose breathing is free, there is no discharge. The voice is loud and unaltered. The chest is normosthenic, symmetrical; supraclavicular fossa and Mohrenheim's fossa are within normal; intercostal space is moderate; epigastric angle is 90° . The bladebones are flat against the posterior surface of the chest. The correlation between anterior-posterior and lateral thoracic diameters is 2:3. The chest is symmetrical. The chest circumference is 81 cm. The chest rise at inhalation and inhalation is 6 cm. The breathing type is costal. The respiratory movements are symmetrical. The number of respiratory movements is 20 per minute. Additional musculature is not involved in breathing. The breath is noiseless, of medium depth, rhythmical. The inhalation-ixhalation correlation is 1:2.

Chest palpation. Morbid areas of resistance or skin puffiness are not detected on palpation. The chest is elastic. The vocal tremor on symmetrical areas is identical. The pleural friction rub is not detected on palpation.

Lungs percussion. Comparative percussion revealed clear lungs sound over the whole pulmonary surface. Topographic percussion revealed the front location of lung apexes at 4 cm above the collar bone on the left and on the right, and the back location at the level of the CVII acantha. The width of Kronig isthmus on the left and on the right is 8 cm.

The lower lungs border:		
	on the right	on the left
l. parasternalis	V rib	—
l. medioclavicularis	VI rib	—
l. axillaris anterior	VII rib	VII rib
l. axillaris media	VIII rib	VIII rib
l. axillaris posterior	IX rib	IX rib
l. scapularis	X rib	X rib
l. paravertebralis	acantha Thxi	acantha Thxi

Respiratory excursion of the lower lungs edge on the left and on the right on l. axillaris media is 6 cm.

Auscultation. Over the whole pulmonary surface vesicular breath sounds are auscultated, no rales. Bronchophony over symmetrical chest regions is identical in both sides.

Conclusion: Respiratory pathological changes have not been detected.

Cardiovascularsystem

Inspection. No deformity of visible pulsation (cardiac hump) in the region of the heart. No jugular venous distention or visible pathological cervical vessels pulsation. Apex beat, cardiac impulse and epigastric pulsation are not detected on visual inspection.

Palpation. Apical thrust is palpated in the fifth intercostal space 1,5 cm inward from the left midclavicular line; apical thrust is limited, low, not intensified, not resistant. Cardiac impulse and epigastric pulsation are not palpated. Weak aorta pulsation is detected in jugular fossa. Symptoms of systolic and diastolic purring thrill are not detected. No tremor in the heart region. Carotid shudder and cervical veins pulsation at rest and at Plesch probe have not been detected. Radial artery pulse in both arms is 68 bpm. Radial artery pulse in both arms is synchronic, rhythmic, full, of moderate tension. The number of oscillations in radial artery walls in the left and right arms is the same.

Percussion.

Borders of relative heart dullness:

right – located along the right edge of breast bone in the fourth intercostal space;

left – located 1,5 cm inward from the left midclavicular line in the fifth intercostal space;

upper – at the level of III rib along the parasternal line on the left.

The diameter of relative heart dullness is 12,5 cm. The width of vascular bundle is 6 cm. Configuration of heart is within normal.

The borders of absolute heart dullness:

right – located along the left edge of breast bone in the fourth intercostal space;

left – located 2,5 cm inward from the left midclavicular line in the fifth intercostal space;

upper – at the level of IV rib along the parasternal line on the left.

Auscultation. Heart sounds auscultation.

1. Mitral valve (apex of heart) – the first heart sound is louder, longer, lower than the second. No cardiac murmur.

2. Aortic valve (in the second intercostal space at the right edge of breast bone) – the second heart sound is louder, longer, lower than the first. No cardiac murmur.

3. Pulmonary artery valve (in the second intercostal space at the left edge of breast bone) – the second heart sound is louder, longer, lower than the first. No cardiac murmur.

4. Tricuspid valve (in the fifth intercostal space at the base of ensisternum in the right) – the first heart sound is louder, longer, lower than the second. No cardiac murmur.

5. Secondary aortic area (in the third intercostal space at the left edge of breast bone) – the first heart sound is louder, longer, lower than the second. No cardiac murmur.

On auscultation heart sounds are clear, rhythmical, equilibration of sounds is preserved. Additional heart sounds and cardiac murmur are not auscultated. On auscultation of abdominal aorta, arteria carotis, and femoral arteries murmur and additional heart sounds are not auscultated. Nun's murmur, Vinogradov-Durozier symptom, stenotic artery sound, Sirotinin-Kukoverov symptom have not been detected.

Blood pressure on both arms is 120/70 millimeters of mercury.

Conclusion: Cardiovascular pathological changes have not been detected.

Digestive system

Inspection.

Oral cavity examination. The tongue is clear, wet, without tongue plague, papillary layer condition is within normal. Oropharynx is not hyperemic. Mucous tunic of the mouth is wet, pink, clean. Fissures and

ulcers are absent. Dentofacial system is within normal. Gingivae, soft and hard palates are pink and wet; hemorrhages and ulcerations are absent.

Abdomen examination. The abdomen is circular-shaped, symmetrical, not distended; it is involved into breathing. No hernial bulging. No visible movements of intestine or stomach, no varicose subcutaneous veins, no herniation anterior abdominal wall. The navel is within normal.

There are three 5–10 mm postoperative stitches on anterior abdominal wall, covered with dressing. One stitch is located along the median line 2 cm above the navel, the second – in the left iliac region (intersection of the line going along the outer edge of the left abdominal rectus muscle with line between anterior superior iliac spines), the third – at the anterior axillary line on the right at the navel level. A drainage PVC pipe is placed in the third stitch area with the diameter of about 4 mm. In it there is serous drainage.

Percussion of abdomen. On investigatory percussion tympanic percussion sound is detected over the whole surface. There is no free fluid or encapsulated fluid in abdominal cavity. Lower border of the stomach is identified at 3,5 cm above the navel.

Palpation of abdomen. On superficial palpation morbidity in the region of postoperative wounds is determined. The abdomen is soft. Muscle tone is preserved. Divergence of rectus abdominis muscles, white line hernias, umbilical ring hernias, inguinal and crural hernias have not been identified. Peritoneal signs have not been detected. Blumberg's sign is negative.

Deep sliding palpation was not executed as it increased morbidity in the region of postoperative wounds.

Auscultation of abdomen. Peristaltic sounds are auscultated. Peritoneal murmur is negative. Vascular sounds in the projection area of abdominal aorta and renal arteries are not auscultated.

Conclusion: post-surgery status. On anterior abdominal wall there are three 5–10 mm postoperative stitches of moderate palpation tenderness. In one of the wounds there is a drainage pipe with low discharge.

Liver and biliary tracts

Inspection. No protrusions or deformations in the right subcostal area. No restrictions of this region in breathing.

Percussion. The borders of absolute and relative liver flatness (real upper border) have not been determined because of gases in the abdominal cavity after the surgery.

Palpation. The lower border of liver doesn't go from under intercostal margin. It is even, soft, nontender. Cholecystitis is not palpable. Kehr's symptom, Murphy's sign and right sided phrenicus symptom are negative.

Conclusion: pathological changes in liver and biliary tracts have not been detected.

Spleen

Inspection. No protrusions or deformations in spleen area.

Percussion. Length at the tenth intercostal space is 7,5 cm. Breadth is 5,5 cm.

Palpation. In supine position and edgewise position the spleen is not palpable.

Conclusion: pathological changes in spleen have not been detected.

Urinary track system

Inspection. No hyperemia or swelling in kidney and urinary bladder area. No alterations in pubic region.

Palpation. Palpation in supine position and in upright position is impossible because of increasing tenderness in the region of postoperative wounds. Palpation of ureter, costovertebral and costo-dorsolumbar points is nontender.

Percussion. Percussion in lumbar region is nontender. Urinary bladder within normal, doesn't overhang pubic articulation. Tympanic resonance above pubis is detected.

Conclusion: pathological changes in urinary track system have not been detected.

Endocrine system

No signs of morbid obesity or eating disorders. Thyroid body within normal limits, soft, nontender to palpation. Secondary sexual characteristics are prominent and conform with the age.

Conclusion: pathological changes in endocrine system have not been detected.

Nervous system

The patient is active and fully oriented, speech, reading and writing are not disordered. Pathological changes in sensorium and motor system have not been detected. The gait is even, coordination of movements is within normal.

Reflexes (pharyngeal, abdominal, tendon and periosteal: elbow jerk, Knee jerk, Achille's jerk) are normal.

Meningeal symptoms: stiff neck, Kernig's symptom, Brudzinsky's upper, medium, and lower symptom have not been detected. No disorders in interfacial and deep sensibility.

Olfaction, sense of taste: normal.

Visual organs. The pupils are normal. No heterophthalmia or nystagmus. The pupils are roundish of 3 mm in diameter. Pupillary light reflex, accommodation and convergence are normal. The sight is keen.

Hearing, vestibular apparatus. Auditory acuity in whisper speech and conversational speech is normal. Vestibular tolerance at Romberg maneuver and pointing test are satisfactory.

The mimic muscles are symmetrically involved into movements (frowning, eye squeezing, cheek blowing).

Conclusion: pathological changes have not been detected.

Surgical status and local alterations (Status localis)

Inspection. Moderately grave condition associated with intoxication. Lies in bed on the right side with legs drawn to the abdomen. Body temperature is 38,1°C. The tongue is dry and covered with thick white coat. On abdomen inspection no visual alterations have been detected, the abdomen is of a regular form and is not swollen. The abdominal wall of the right iliac region lags behind in breathing.

Abdomen percussion.

On investigatory percussion tympanic resonance is identified over the whole abdomen surface. No free fluid or encapsulated liquid in the abdominal cavity. The lower stomach border is percussed 3,5 cm above the navel. Razdolsky's sign is positive in the right iliac region.

Abdomen palpation.

On superficial investigatory palpation there is tenderness in the right iliac region, local muscle tension of the anterior abdominal wall in this region. Voskresensky's symptom, Rovsing's symptom, Sitkovsky's

symptom, Bartomier's symptom are positive. Rebound tenderness is doubtful. Deep palpation has not been executed due to heightened tenderness in the right iliac region and muscle tension of the anterior abdominal wall in this region.

Abdomen auscultation. The intestinal peristalsis is auscultated as weakened in the right iliac region. No peritoneal murmur. Vesicular murmur in the projection area of abdominal aorta and renal arteries are not auscultated.

Per rectum: No pathologies in the perianal region. The sphincter tone is regular, straight intestine walls are nontender. Fecal masses on the glove are of regular color.

At the beginning of disease management.

Inspection.

There are three 5–10 mm postoperative stitches on anterior abdominal wall, covered with dressing. The first 10 mm stitch is located along the median line 2 cm above the navel, the second 5 mm stitch – in the left iliac region (intersection of the line going along the outer edge at the left abdominal rectus muscle with line between anterior superior iliac spines), the third 5mm stitch – at the anterior axillary line on the right at the naval level. A drainage PVC pipe is placed in the third stitch area with the diameter of about 4 mm. In it there is serous drainage.

Percussion of abdomen. On investigatory percussion tympanic percussion sound is detected over the whole surface. There is no free fluid or encapsulated fluid in abdominal cavity. Lower border of the stomach is identified at 3,5 cm above the navel.

Palpation of abdomen. On superficial palpation morbidity in the region of postoperative wounds is determined. The abdomen is soft. Muscle tone is preserved. Divergence of rectus abdominis muscles, white line hernias, umbilical ring hernias, inguinal and crural hernias have not been identified. Peritoneal signs have not been detected. Blumberg's sign is negative.

Deep sliding palpation was not executed as it increased morbidity in the region of postoperative wounds.

Auscultation of abdomen. Peristaltic sounds are auscultated. Peritoneal murmur is negative.

VI. Provisional diagnosis

Basic diagnosis: acute appendicitis.

Complications: no.

The diagnosis is made on the basis of:

- the patient's complaints at hospitalization about acute pain in the right iliac region, sickness, and temperature rise up to 38,3 °C.

- the disease history. Acute onset of the disease. Pain syndrome was located in the epigastric region, then migrated into the right iliac region (Kocher's sign). The pain syndrome increased while walking. There was a single-shot vomit, that brought no relief. The body temperature is up to 38,3 °C; physical examination. Moderately grave condition associated with intoxication. Lies in bed on the right side with legs drawn to the abdomen. Body temperature is 38,1 °C. The tongue is dry and covered with thick white coat. The abdominal wall of the right iliac region lags behind in breathing. On abdomen percussion Razdolsky's sign is positive in the right iliac region. On palpation there is tenderness in the right iliac region, local muscle tension of the anterior abdominal wall in this region. Voskresensky's symptom, Rovsing's symptom, Sitkovsky's symptom, Bartomier's symptom are positive. Rebound tenderness is doubtful. Deep palpation has not been executed due to heightened tenderness in the right iliac region and muscle tension of the anterior abdominal wall in this region. The abdominal murmur is auscultated as weakened in the right iliac region.

VII. Patient's examination plan

Laboratory tests:

- 1) clinical blood analysis;
- 2) clinical urine analysis;
- 3) biochemical blood analysis (total protein, blood glucose, creatinine, blood urea);
- 4) hepatitis A and B blood test;
- 5) Wassermann reaction and HI virus;
- 6) blood group and rhesus blood factor test;
- 7) fibrinolytic blood activity and fibrinogen;

Instrumental methods:

- 1) electrocardiogram.

Specialized medical consultations:

- 1) therapist;
- 2) gynecologist.

VIII. The laboratory data and instrumental examination data

Laboratory tests:

1) clinical blood analysis (01.10.2018):

Показатели	Результат	Норма
hemoglobin	123	120–175 g/l
RBCs	4,2	$4,0-5,5 \times 10^{12}/l$
globular value	0,9	0,8–1,05
WBCs	12	$4,0-9,0 \times 10^9/l$
stab neutrophils	9	1–6 %
segmented neutrophils	47	47–72 %
eosinophiles	3	0,5–5 %
basophils	1	0–1 %
lymphocytes	21	18–40 %
monocytes	4	3–11 %
thrombocytes	197	$180-320 \times 10^{12}/l$
blood sedimentation rate	22	2–15 mm/h

Impression: skeocytosis and blood sedimentation rate increase, indicating an inflammatory process.

2. clinical urine analysis(01.10.2018):

Parameters	Result	Norm
physico-chemical properties:		
transparency	transparent	transparent
reaction	neutral	neutral
color	straw-coloured	straw-coloured
density	1021	1020–1026
protein	no	no
Micrography:		
squamous epithelial cells/hpf	2	0–3 per field of view
transitional epithelium	no	no
renal epithelial cell	no	no
WBCs	no	1–2 per field of view
hyaline casts	no	no

Impression: no definite abnormality.

3. biochemical blood analysis (01.10.2018):

Parameters	Result	Norm
total protein	70	66–87 g/l
creatinine	55	44–120 mcmmole/l
blood urea	3,0	2,5–8,3 mcmmole/l
blood glucose	4,1	3,0–6,0 mcmmole/l

Impression: no definite abnormality.

4. hepatitis B and C blood test(01.10.2018): negative.
5. Wassermann reaction (quick test) and HI virus) (01.10.2018): negative.
6. blood group and rhesus blood factor test (01.10.2018): O(I), Rh (+).
7. fibrinolytic blood activity and fibrinogen:

Parameters	Result	Norm
PTI	88	73–122 %
INR	1,06	0,82–1,18
fibrinogen	2,99	2,7–4,013

Impression: no definite abnormality.

Instrumental methods:

1. electrocardiogram (01.10.2018): sinus heart rate, regular, heart rate – 68 beats per minute, normotopia of electrical axis of heart.

Specialized medical consultations:

1. Therapist. **Impression:** no comorbidities.
2. Gynecologist. **Impression: no gynecological disorders.**

IX. Differential diagnostics of the patient

Differential diagnostics should be conducted in relation to the following diseases:

1. Early case of **acute gastritis, gastroenteritis, gastroenterocolitis** often provoke false diagnosis of acute appendicitis. As well as acute appendicitis these diseases cause pain in epigastric region or all over abdomen, sickness and vomiting, sometimes diarrhea; but there is no rigidity of abdominal muscles, rebound tenderness or other signs of acute appendicitis; tenderness to palpation is extended and is not localized in the right iliac region. Reexaminations are needed with the intervals of 2–3 hours during 6 hours to rule out acute appendicitis.

2. With women it is necessary to differentiate acute appendicitis with **acute gynecological disorders** and first of all with acute adnexitis. Clinical symptoms of these two diseases are particularly similar at pelvic location of cecal appendage.

At acute right sided adnexitis steady not very acute pain settles in lower part of the abdomen and often irradiates to the right leg or right vulvar lip, accompanied by high body temperature and menstrual disorder.

Abdomen palpation gives pain to femoral arch and pubic. There is no rigidity of abdominal muscles, rebound tenderness is negative. An enlarged morbid ovary and uterine tube are palpated at vaginal examination, metrectopia causes pain or its intensification (Promptov's symptom). These signs together with carefully collected history enable to differentiate acute appendicitis and acute adnexitis.

3. **Perforated duodenal ulcer.** If perforation is small and covered by a neighboring organ, there might be a clinical picture similar to acute appendicitis. Gastric contents get to the right iliac region causing peritoneal irritation and peritoneal inflammation. Kocher's sign will be positive. There will be localized pain and muscle tension in the right iliac region. Ulcer history might not precede, beginning of the disease is atypical (fleeting acute pain, not always definitely localized). Free gas in abdomen is detected by radiologic investigation revealing perforation of a hollow organ.

However, 30 % of patients don't have pneumoperitoneum as there is no air in the stomach; there is a small perforation blocked by bits of food or covered by a neighboring organ (liver, omentum), which is called covered perforation. In these cases, Saiger and Kan's method can be applied (Saydjar, Kane, 1959), when air or oxygen is transported to stomach via a nasogastric tube followed by another radiologic investigation. The air or oxygen, transported to the stomach unblocks the covered perforation and heads for the abdominal cavity. X-ray picture will show gases under the diaphragm above the liver thus pneumoperitoneum occurs. The method is dangerous as the air going from the stomach together with gastric contents contaminates the abdominal cavity.

In difficult diagnostic situations fibrogastroduodenoscopy and laparoscopy can help to differentiate between acute appendicitis and atypical ulcer perforation.

4. **Crohn's disease (terminal ileitis) – inflammatory process in intestinal canal of probably autoimmune genesis** (ethiology is still unclear). Different areas of intestinal canal are affected. There is regional ileitis, colitis, enteritis, enterocolitis, but terminal ileum is affected most frequently.

This disease involves all layers of bowel wall up to serous membrane. It is characterized by acute onset of disease, colicky pain or constant pain in the right side of abdomen without vomiting, fever, leukocytosis, diarrhea with light-colored fluid, thickening of blind intestine and adjacent narrow intestine, positive symptoms of peritoneal irritation (rebound tenderness). The clinical disease pattern can be so similar to acute appendicitis that not every surgeon can refrain from an operation that facilitates diagnosing.

5. Meckel's diverticulum inflammation. Differential diagnostics of acute appendicitis and inflammatory Meckel's diverticulum is difficult. Since 1598, when Johann Meckel described the diverticulum, few surgeons have presurgically diagnosed diverticulitis: both diseases have a lot of similar symptoms. Still acute diverticulitis differs by a more intensive course with apparent intoxication and fever response. Pain is more often localized closer to the navel. These differences don't have differential and diagnostic value. The patients are usually operated for acute appendicitis. Discordance of the clinical disease pattern and alterations in vermiform appendix makes the surgeon revise the ileum for minimum 80 cm from the ileocaecal angle.

X. Treatment plan and methods

1. Conservative management:

a) before surgery – bed regime, bowel rest, premedication 40 min before surgery (atropine, dimedrol, promedol). 40 min before surgery a single dose of cefazolin 1,0 iv;

б) first day after surgery – bed regime, bowel rest.

Nonnarcotic analgetic (analgin 1,0 IM 3 times a day № 4), spasmolytics (papaverine 0,1 % IM 2 times a day № 4), antimicrobial therapy (a single dose of cefazolin 1,0 iv intraoperatively, then every 8 hours during the first day after surgery), prevention of thromboembolic disorders (tight bandage of legs, hemostasis control).

2. Surgical management – appendectomy.

Pre-surgical epicrisis.

Patient K. Maria Ivanovna, 41, was taken to the surgical hospital in an urgent order by accident-assistant squad with acute appendicitis as the directional diagnosis. She complained about acute pain in the right iliac region, sickness, temperature rise up to 38,3 °C. According to the patient the beginning was acute about 24 hours ago, when the pain appeared in the epigastric region and then migrated to the right iliac region (Kocher's sign). The disease is accompanied by sickness and single-shot vomit that brought

no relief and temperature rise up to 38,3 °C. Follow-up examination revealed leukocytosis ($12 \times 10^9/l$) (stab neutrophil 9 %) and increase in erythrocyte sedimentation rate to 22 mm/h. The provisional diagnosis of acute appendicitis indicated immediate surgery of appendectomy. No contraindications for the surgery were found. Given the patient's young age and absence of complications lap appendectomy with endotracheal anesthesia is planned. Voluntary informed consent of the patient is available, she was warned about possible complications. Preventive medical measures against thromboembolic disorders were taken.

Surgical record
lap appendectomy, abdominal drainage
1 October 2018 (7.10–8.05 a.m.)

Following the preparation of the surgical area with 0,5 % chlorhexidine essence, a surgical incision was made at endotracheal anesthesia above the navel. Pneumoperitoneum was induced up to 13 Mm hg. The camera and additional instruments were introduced. In the small pelvis and right paracolic gutter there were turbid exudate of moderate quantity and abdominal membrane hyperemia. On inspection the vermicular appendix was 8 cm, thickened, hyperemic, with fibrin accumulation. Other pathological changes were not detected. Surgical release of vermicular appendix was performed. Mesenteric vessels were ligated. No signs of mesenteric hemorrhage. Appendectomy: the residual limb was dipped into the head of blind colon with the help of a purse and Z-shaped stitch. Hemostasis. Dry. Abdominal cavity was dried. A 4 mm drainage PVC pipe was placed into the surgical wound in the right iliac region. Control of drapes and instruments: within normal. The wounds were treated with 0,5 % chlorhexidine hydrous solution and sutured tightly layer-by-layer. Aseptic dressing.

Gross specimen: 8 mm vermicular appendix, thickened, hyperemic, with fibrin accumulation.

Post-surgery diagnosis: acute phlegmonous appendicitis complicated by local seroplastic peritonitis.

XI. Clinical diagnosis and its substantiation

Main diagnosis: acute phlegmonous appendicitis.

Complications: local seroplastic peritonitis.

The diagnosis was made on the basis of:

- the patient's complaints about acute pain in the right iliac region, sickness, temperature rise up to 38,3 °C;
- disease history. The beginning was acute about 24 hours ago, the pain appeared in the epigastric region and then migrated to the right iliac region (Kocher's sign). The pain syndrome increases while walking. The disease is accompanied by sickness and a single-shot vomit, that brought no relief. The body temperature is up to 38,3 °C;
- physical examination of the patient. Moderately grave condition associated with intoxication. Lies in bed on the right side with legs drawn to the abdomen. Body temperature is 38,1 °C. The tongue is dry and covered with thick white coat. The abdominal wall of the right iliac region lags behind in breathing. On abdomen percussion Razdolsky's sign is positive in the right iliac region. On palpation there is tenderness in the right iliac region, local muscle tension of the anterior abdominal wall in this region. Voskresensky's symptom, Rovsing's symptom, Sitkovsky's symptom, Bartomier's symptom are positive. Rebound tenderness is doubtful. Deep palpation has not been executed due to heightened tenderness in the right iliac region and muscle tension of the anterior abdominal wall in this region. The abdominal murmur is auscultated as weakened in the right iliac region;
- lab tests data. Skeocytosis ($12 \times 10^9/l$) (stab neutrophil 9 %) and increase in erythrocyte sedimentation rate to 22 mm/h;
- phlegmonous appendicitis complicated by local seroplastic peritonitis was revealed intraoperatively.

XII. Surgical record

2 October 2018. General condition satisfactory. Temperature 37,3°C. Alert. Active. Normal sleep. Complaints about morbidity on movement in the region of postoperative wounds and presence of a drainage PVC pipe. Visible mucous membranes are pink, wet, clean. The tongue is wet and clean. Heart sounds are muffled and rhythmical. Pulse – 80 beats per minute, arterial tension 125/80 Mm hg. In lungs: vesicular breathing, no murmur. RF 20 per min. The abdomen is soft, morbid in the region of postoperative wounds, not swollen, participates in breathing. Peritoneal symptoms are negative. Unassisted urination. No windiness.

Dressing: removed; surgical wounds with no inflammatory signs, aseptic dressing applied. 15 mm of serous drainage in the drainage PVC pipe.

Prescriptions: diet (broth), semilying regime, non-narcotic analgetics, spasmolytics, antimicrobial therapy (a single dose of cefazolin 1,0 iv intraoperatively, then every 8 hours during the first day after surgery).

3 October 2018. General condition satisfactory. Temperature 36,9 °C. Alert. Active. Normal sleep. Complaints about morbidity on movement in the region of postoperative wounds and presence of a drainage PVC pipe. Visible mucous membranes are pink, wet, clean. The tongue is wet and clean. Heart sounds are muffled and rhythmical. Pulse – 68 beats per minute, arterial tension 125/80 Mm hg. In lungs: vesicular breathing, no murmur. RF 20 per min. The abdomen is soft, morbid in the region of postoperative wounds, not swollen, participates in breathing. Peritoneal symptoms are negative. Unassisted urination. No windiness.

Dressing: removed; surgical wounds with no inflammatory signs, healing by primary intention. No drainage in the drainage PVC pipe. The pipe removed. Aseptic dressing applied.

Prescriptions: diet (soup, porridge, puree). Travel within hospital department. Continue administering non-narcotic analgetics and spasmolytics. Discontinue antimicrobial therapy.

4 October 2018. General condition satisfactory. Temperature 36,6 °C. Alert. Freely travels within hospital department. Complaints about morbidity on movement in the region of postoperative wounds. Visible mucous membranes are pink, wet, clean. The tongue is wet and clean. Heart sounds are muffled and rhythmical. Pulse – 68 beats per minute, arterial tension 120/80 Mm hg. In lungs: vesicular breathing, no murmur. RF 16 per min. The abdomen is soft, morbid in the region of postoperative wounds, not swollen, participates in breathing. Peritoneal symptoms are negative. Unassisted urination. Single unassisted defecation.

Dressing: removed; surgical wounds with no inflammatory signs, healing by primary intention. No drainage in the drainage PVC pipe. The pipe removed. Aseptic dressing applied.

Prescriptions: diet (limitation on bread and flour products, fruit, vegetables, juices). Discontinue analgetics and spasmolytics.

5 October 2018. General condition satisfactory. Temperature 36,63 °C. Alert. Active. Normal sleep. Complaints about morbidity on movement in the region of postoperative wounds. Visible mucous membranes are pink, wet, clean. The tongue is wet and clean. Heart sounds are muffled and rhythmical. Pulse – 68 beats per minute, arterial tension 120/80 Mm hg.

In lungs: vesicular breathing, no murmur. RF16 per min. The abdomen is soft, fairly morbid in the region of postoperative wounds, not swollen, participates in breathing. Peritoneal symptoms are negative. Unassisted urination. Single unassisted defecation. Normal bowel and bladder functions.

Dressing: removed; surgical wounds with no inflammatory signs, healing by primary intention. Aseptic dressing applied.

The patient is discharged from hospital to be followed up by surgeon at place of residence. Recommendations: remove the stitches on the seventh day after the surgery.

XIII. Prognosis

Prognosis for the life: favorable.

Recovery prognosis: favorable.

Work-related prognosis: favorable.

XIV. Epicrisis

Patient K. Maria Ivanovna, 41, was treated in Burdenko Penza Regional Hospital from 01.10.2018 to 05.10.2018 with the diagnosis of acute phlegmonous appendicitis complicated by local seroplastic peritonitis. She complained about acute pain in the right iliac region, sickness, temperature rise up to 38,3 °C. According to the patient the beginning was acute about 24 hours ago, when the pain appeared in the epigastric region and then migrated to the right iliac region. The disease was accompanied by sickness and single-shot vomit that brought no relief and temperature rise up to 38,3 °C.

Follow-up examination revealed leukocytosis ($12 \times 10^9/l$) (stab neutrophil 9 %) and increase in erythrocyte sedimentation rate to 22 mm/h. The provisional diagnosis of acute appendicitis indicated immediate surgery of appendectomy. No counterindications for the surgery were found.

Lap appendicectomy with endotracheal anesthesia was performed on 1 October 2018. Post-surgery period was without complications. The drainage tube was removed on the second day after the surgery. Surgical wounds healed by primary intention with no inflammatory signs. The patient is discharged from hospital in a satisfactory condition to be followed up by surgeon at place of residence. Recommendations: remove the stitches on the seventh day after the surgery at place of residence and limited physical activity during 3 months.

REFERENCE LIST

Main references

1. Savelyev, V. S. Surgical diseases : v 2 t. / V. S. Savelyev, A. I. Kiriyenko. – Moscow : GEOTAR-Media, 2005. – T. 1. – 608 p.
2. Savelyev, V. S. Surgical diseases : v 2 t. / V. S. Savelyev, A. I. Kiriyenko. – Moscow : GEOTAR-Media, 2005. – T. 2. – 400 p.
3. Kuzin, M. I. Surgical diseases / M. I. Kuzin. – Moscow : Medicine, 2002. – 784 p.

Additional references

4. Belokonev, V. I. Diagnosis and treatment of esophageal injuries: monograph / V. I. Belokonev, V. V. Zamyatin, E. P. Izmaylov. – Samara : Perspective, 1999. – 160 p. – (Difficult questions of practical surgery).
5. Pediatric surgery : textbook / edited by Iu. F. Isakova, A. Iu. Razumovskogo. – Moscow : GEOTAR-Media, 2014. – 1040 p.
6. Surgical diseases in children: textbook / edited by Iu. F. Isakova. – Moscow, 1993. – 704 p.
7. Lopatkin, N. A. Urology : textbook / N. A. Lopatkin, A. F. Darepkov, V. G. Goryunov; edited by N. A. Lopatkina. – 4-e edition, stereotype. – M.: Medicine, 1995. – 496 p.
8. Nikolsky, V. I. Abscesses of the abdomen / V. I. Nikolsky, A. Iu. Sapozhkov. – Penza : publishing house NPO «Start», 1994. – 204 p.
9. Nikolsky, V. I. Appendicitis : study guide / V. I. Nikolsky, A. V. Baulin. – Penza : IITC PGU, 2008. – 144 p.
10. Nikolsky, V. I. Gastrointestinal bleeding: study guide / V. I. Nikolsky, K. I. Sergatsky, G. V. Shcherbakov, A. V. Shabrov. – Penza : publishing house PGU, 2017. – 192 p.
11. Nikolsky, V. I. Intestinal obstruction : study guide / V. I. Nikolsky, K. I. Sergatsky, A. V. Gerasimov, A. V. Klimashevich. – Penza : publishing house PGU, 2015. – 206 p.
12. Nikolsky, V. I. Pancreatitis : monograph / V. I. Nikolsky, E. G. Yutkina, E. V. Iangurazova, V. V. Rozen. – Penza : publishing house PGU, 2011. – 296 p.
13. Nikolsky, V. I. Cardiovascular surgery : study guide for students medicine institute / V. I. Nikolsky, V. A. Temnikov, A. V. Baulin. – Penza : publishing house PGU, 2010. – 270 p.

14. Nikolsky, V. I. Jaundice syndrome : study guide / V. I. Nikolsky, M. V. Nikolskaia, A. V. Klimashevich, A. V. Ge-rasimov. – Penza : publishing house PGU, 2015. – 200 p.

15. Nikolsky, V. I. Abdominal trauma : study guide / V. I. Nikolsky, E. V. Titova, A. V. Klimashevich, K. I. Sergatsky. – Penza : publishing house PGU, 2017. – 172 p.

16. Nikolsky, V. I. Cholecystitis: study guide / V. I. Nikolsky, A. V. Baulin. – Penza : publishing house PGU, 2009. – 244 p.

17. Onkology / edited by S. B. Petersona. – Moscow : GEOTAR-Media, 2014. – 288 p.

18. Romanchishev, A. Thyroid and parathyroid surgery / A. Romanchishev. – Moscow : News, 2009. – 648 p.

19. Temnikov, V. A. Trauma of the heart and great vessels : study guide / V. A. Temnikov, E. E. Biryukov; edited by A. N. Mitroshina. – Penza : publishing house PGU, 2013. – 48 p.

20. Chernousov, A. F. Artificial esophagus diseases / A. F. Chernousov, D. V. Ruchkin, F. A. Chernousov, D. A. Balalykin. – Moscow : Vidar, 2008. – 673 p.

21. Chernousov, A. F. Esophageas surgery guide for doctors/ A. F. Chernousov, P. M. Bogopolsky, F. S. Kurbanov. – Moscow : Medicine, 2000. – 352 p.

APPENDIX 1. COURSE PAPER ASSIGNMENT

THE MINISTRY OF SCIENCE AND HIGHER EDUCATION
OF THE RUSSIAN FEDERATION
Penza State University

«Approved»
head of Surgery Department
Doctor of Medicine, professor
_____ A. N. Mitroshin

Course Paper Assignment
In «Faculty Surgery, Urology»
(«Hospital Surgery, Pediatric Surgery»)
Topic: «...»

Tasks:

- a) review information resources on the topic;
- б) specify key issues;
- в) present information about the patient in the form of academic disease history
- г) in an essay report on the work done, draw main inferences, provide illustrations when necessary.

Supervisor _____

supervisor's academic degree,
pedagogical position, name, surname

APPENDIX 2. COURSE PAPER TITLE PAGE

THE MINISTRY OF SCIENCE AND HIGHER EDUCATION
OF THE RUSSIAN FEDERATION
Penza State University

Surgery Department

Course Paper
In «Faculty Surgery, Urology»
(«Hospital Surgery, Pediatric Surgery»)
Topic: «...»

Specialty – 31.05.01 General Medicine

Student: _____ I. I. Ivanov

Group: 18JJI1

Supervisor: _____

(supervisor's academic degree,
pedagogical position, name,
surname)

Mark _____

Date of presentation _____

2019

APPENDIX 3. COURSE PAPER CONTENT

Course paper content

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3. Acute gangrenous appendicitis.
4. Acute appendicitis complicated by appendicular lump.
5. Acute destructive appendicitis complicated by peritonitis.
6. Gallstone disease. Obstructive jaundice.
7. Gallstone disease. Acute calculous cholecystitis.
8. Peptic ulcer complicated by hemorrhage.
9. Peptic ulcer complicated by perforation.
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22. Benign prostatic hyperplasia. Acute urinary retention.
23. Urinary organs trauma.

APPENDIX 5. COURSE PAPER TOPICS IN “HOSPITAL SURGERY, PEDIATRIC SURGERY”

1. Acute cholecystitis. Diagnosis and management.
2. Modern approaches to hernia management.
3. Thyroid disorders.
4. Modern approaches to diagnosis and management of obstructive jaundice.
5. Acute appendicitis complications.
6. Esophagus disorders.
7. Pancreatic tumors.
8. Cholelithiasis. Acute calculous cholecystitis.
9. Modern approaches to esophagus disorders management.
10. Mistakes and risks of hernia management.
11. Iatrogenic complications of cholelithiasis management.
12. Acute intestinal obstruction.
13. Cholelithiasis complications.
14. Modern approaches to acute pancreatitis management.
15. Clinical picture, diagnosis and management of Basedow's disease.
16. Specific features and management complications of esophageal atresia.
17. Cholecystectomy at acute cholecystitis. Iatrogenic affects.
18. Perforated gastroduodenal ulcer disease. Diagnosis and management.
19. Modern approaches to digestive hemorrhage management. Surgical approach.
20. Complications of acute intestinal obstruction.
21. Modern approaches to acute cholecystitis management.
22. Acute cholecystitis. Etiology, pathogenesis, clinical picture, diagnosis, management and surgical approach.
23. Hepatites.
24. Acute pancreatitis. Indications to surgical management.
25. Modern approaches to diagnosis and management of peritoneal abscess.
26. Cholelithiasis complications.
27. Peptic ulcer complications.
28. Mistakes and complications of hernia management.
29. Mistakes and complications of acute appendicitis management.
30. Pancreatolysis: Etiology, pathogenesis, clinical picture, diagnosis and management.
31. Abdominal traumas.
32. Gastrointestinal hemorrhage. Diagnosis and management.
33. Complications, diagnosis and management of acute intestinal obstruction.
34. Modern approaches to inguinal hernia management.
35. Widespread peritonitis surgical management.
36. Surgical approach at gastrointestinal hemorrhage.
37. Nonpenetrating abdominal trauma.
38. Conformational abnormalities.

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Учебное издание

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АКАДЕМИЧЕСКАЯ ИСТОРИЯ БОЛЕЗНИ ХИРУРГИЧЕСКОГО БОЛЬНОГО = ACADEMIC SURGICAL PATIENT HISTORY

Технический редактор *Ю. В. Анурова*
Компьютерная верстка *Ю. В. Ануровой*

Подписано в печать 03.09.2019.
Формат 60×84¹/₁₆. Усл. печ. л. 3,26.
Заказ №315. Тираж 100.

Издательство ПГУ
440026, Пенза, Красная, 40
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