ФЕДЕРАЛЬНОЕ ГОСУДАРСТВЕННОЕ БЮДЖЕТНОЕ ОБРАЗОВАТЕЛЬНОЕ УЧРЕЖДЕНИЕ ВЫСШЕГО ОБРАЗОВАНИЯ
«АМУРСКАЯ ГОСУДАРСТВЕННАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ»
МИНИСТЕРСТВА ЗДРАВООХРАНЕНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ

Кафедра иностранных языков

Учебно-методические рекомендации
для студентов
по дисциплине «Основы профессионального перевода»
k теме «Хирургия»

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Pre-Texts exercises.

1. Couple the antonyms:
- subside, diarrhea, radical surgery, chronic process, to increase, constipation, conservative treatment, acute process.

2. Answer the following questions:
   1) What organs are there in the abdominal cavity?
   2) What diseases of the abdominal cavity do you know?
   3) What are the types of ulcer and appendicitis?
   4) What symptoms do abdominal disorders produce?
   5) What are the methods of treatment of these diseases?

3. Translate the following sentences from Russian into English:
   1) У меня сильные боли в животе.
   2) У вас аппендицит. Вам необходима срочная операция.
   3) У этого больного тошнота и рвота. Он должен сделать анализы.
   4) Больной заболел 2 дня назад.
   5) Боли начались вчера после приема острой пищи.

4. Finish the following sentences:
   1) When I got up yesterday I felt severe pain in the abdomen. So...
   2) As the pain didn't go away after taking some pills I...
   3) The doctor asked my case history because...

5. Answer the questions and speak on the given topics.
   1) In what cases are operations performed?
   2) Who performs operations?
   3) By whom is the surgeon assisted during operation?
   4) How are instruments and dressing material prepared for an operation?
   5) How is the patient prepared for an operation?
   6) What does the surgeon wear during the operation?
   7) What does post-operative care consist of?
   8) Why must instruments be sterilized?

6. Read the text and answer the following questions remembering some facts from the theoretical course:
   1) Who sterilizes instruments?
   2) Where are instruments sterilized?
   3) Are they placed in hot or cold water?
   4) What is done with glass syringes?
   5) How long must instruments be sterilized?
   6) Where are they kept after sterilization?
OPERATING ROOM TECHNIQUE

The words "Operating room" have a formidable sound to most people. To the average layman, it is the one place in the world to which he hopes never will have to go. The surgeon knowing that so much depends upon his skill is working under strain and tension. The nurse is the person who must think quickly and logically, be scrupulous and conscientious. Teamwork, cooperation and conscientiousness are essential in any ward situation but never more so than in the operating room, where a minute's delay, a weakened ligature, a torn glove, the patient unnecessary questioning of orders may mean the life of the patient.

When assisting the surgeon in performing operations the nurse must carry out aseptic technique. All instruments, gauze and other materials which come in contact with the wound are sterile. The patient is draped with a sterile towel and the doctor wears sterile gloves. A sterile field is set upon a tray, on which instruments and dressings are placed. Everything should be done to prevent organisms from entering the wound and thereby causing infection.

The entire operating room should be spotlessly clean. The furniture and equipment should be arranged to permit the greatest amount of efficiency. The room should be well ventilated but with no draught to the patient. All materials needed for the operation should be selected and brought to the operating room in advance. Instruments should be selected and tested to see that they work properly and easily. A chemical solution is made and knives, needles, scissors and other articles which need to be sterilized in this manner are placed in it and left for 20 minutes.

PREPARATION FOR OPERATION

Each one the operating room personnel removes his outer clothes, puts on his operating clothes, and then proceeds to the scrub-up room. Here the hands and forearms are scrubbed for 15 minutes with hot water and soap and rinsed and soaked in 70 per cent alcohol. This washing should be done in a methodical way so that each side of the fingers and every part of the hands, and forearms is scrubbed thoroughly. It is essential that persons engaged in surgical work keep their nails short and clean. After scrubbing and rinsing in alcohol, the surgeon enters the operating room where he is handed a hand towel with which he dries only his hands, leaving his forearms untouched by the towel. He then puts on a sterile gown and sterile rubber gloves. When fully prepared as above, and while waiting for the start of the operation, the surgeon and his assistants must hold their hands above their waist. If the wait is long the hands should be covered with sterile towel.

The field of operation is shaved before the patient enters the operating room. If a general anesthetic is used the skin preparation done after the patient is unconscious. With spinal anesthesia the field is prepared after the anesthesia is given. With local or block anesthesia the field is prepared before the injection of the anesthetic is given.

As a spinal anesthetic is used special material and apparatus are necessary which should be laid out on a table. After the spinal injection the table is tilted with the patient's head lowered at about a 10° angle.

There are many ways of preparing the skin. A simple and very satisfactory one is to scrub the skin with a gauze sponge wet with ether to remove grease and moisture, and then paint the skin thoroughly with iodine or some other tincture, and allow drying. After the tincture is completely dry paint the skin with a second coat, beginning in the middle of the field and progressing outward to the edges of the previous coat. The field should then be draped with sterile towels and sheets, so that only the prepared is exposed.
Change the following sentences so that Passive Infinitive is used after the Modal verb. Omit the agent in these sentences:

Model: I must do it at once.
   I must be done at once.

1. We must keep all instruments thoroughly cleansed.
2. We can clean sterile instruments by boiling them.
3. One must sterilize caps, gown, and rubber gloves, in a steam pressure sterilizer.
4. You must give the patient a sedative to relive his pain.
5. You should not give the drug repeatedly.
6. The doctor should tell the patient to stay in bed.
7. They must perform the operation immediately.
8. They have to sign these papers.
9. She will have to check the analysis.
10. You should do the work with care.

Give correct answers using the verb in the Passive Voice as in the model.

Model: What is done before an operation is performed?
   The patient is prepared.

to sterilize instruments, to prepare the operating theatre, to scrub hands, to prepare apparatus for various procedures, to put on sterile gowns and masks, to arrange the instruments on the trolleys, to wheel in the patient, to drape the operating area, to anaesthetize the patient.

Change the active construction of the sentences into a passive one.

1. When he fell ill a nurse took good care of him.
2. First of all she put the patient to bed.
3. She gave him a sedative and some herb-tea.
4. She supplied him with a hot-water bottle.
5. In this way she brought down his temperature.
6. With good nursing she cured the patient quickly.

Translate the sentences:

1. The surgeon did not doubt that he could perform this operation under local anesthesia. 2. Gangrenous forms of appendicitis are dangerous to life because they may result in peritonitis. 3. The retention of stool may be due to the inflammatory process in the appendix. 4. During the operation the upper lobe of the lung was removed since a malignant tumor had been revealed there. 5. After the attack of acute appendicitis had been controlled the patient complained of a moderate tenderness on palpation.
ACUTE APPENDICITIS

Acute appendicitis is known to occur in all age groups. Its incidence varies in different sex groups; it is more frequent in women from 20 to 40 years of age. Cases of appendicitis have been noted to occur even in infants and in very old age.

Acute appendicitis is known to begin suddenly with sharp pain, which is at first felt in epigastrium but then becomes generalized in the abdomen. The pain becomes worse on deep breathing in and coughing, it does not radiate and is accompanied by nausea, retention of stools and gases.

The temperature is normal or subfebrile and there is moderate leukocytosis. The ESR is initially normal. With the development of the disease temperature elevation is observed and ESR becomes increased. The pulse is quick but it is found to be not more than 90-100 beats per minute. The tongue is coated and dry.

The attack of acute appendicitis is known to last for 3-4 days. Then temperature returns to normal, abdominal pains decrease and only a moderate tenderness is felt in the right lower part of the abdomen on palpation.

Acute appendicitis is treated surgically. The operation is performed not under general but under local anesthesia.

The appendix is removed immediately to prevent its rupture, which may result in peritonitis. Such forms of appendicitis as gangrenous and perforating are particularly dangerous to life. But sometimes even a mild form of appendicitis is likely to have a severe course and result in perforation.

Retell the text based on the following words:

- to occur during pregnancy,
- to be found,
- to be most common,
- common complaints
- to be established,
- to be dedicated in,
- to be difficult to diagnose accurately,
- to be associated with.

ACUTE APPENDICITIS DURING PREGNANCY

Patients with acute appendicitis occurring during pregnancy diagnosed and treated at three large hospitals in the Phoenix area over 8-year period were analyzed. The incidence of acute appendicitis was 1 per 2188 pregnancies (35 cases).

Acute appendicitis was found to be most common in 20 to 25 year-age groups. 88 per cent of patients had symptoms for less than 24 hours before the admission. The duration of symptoms ranged from 6 hours to 6 days.

51% of patients (18) were anorexic. Nausea and vomiting were common complaints. Each complained of abdominal pain and had tenderness in the abdomen. Muscular tension was detected. An elevated temperature was observed in 21 patients. White blood cell counts of more than 15000/mm$^3$ were found in only one-third of the patients. A normal urinalysis result was a common finding (82 per cent of the patients).

Uncomplicated acute appendicitis was detected in 27 patients (77%). Appendicitis with gangrene but no perforation proved to be in 4 patients. Four patients had acute appendicitis
with perforation, two of them having generalized peritonitis. Two women who had perforation had abscess formation.

The average hospital stay was 5.4 days with a range extending from 4 to 15 days.

TEXT

Read the text and give the title of it.

The term laser is an abbreviation for “light amplification by stimulated emission of radiation”. A laser is a device, which can emit a very intensive beam of light. The first working laser was not produced until 1960. There are many different types of laser developed since then, and they have revolutionized many processes in industry, science and medicine.

Although laser treatment has been in use for the decades. It is only recently that lasers have been tried on some disorders, from brain tumors and bleeding ulcers to lung lesions.

The advantage of laser therapy is that there are procedures that often can be done in an outpatient clinic.

So far there are three main laser types that are used in medicine. With a laser doctors will be able to remove tissue with much more precision than with scalpel. It is a laser that is a precise cutting tool. It is a new procedure that coagulates blood and stops bleeding.

Key to lasers is the ability to remove tumors and not to damage surrounding tissue.

There are many guides to lasers in medicine written for the non-specialists. They describe what lasers are, how they work, and what they can do for the patient.

There will soon be no area of medicine in which lasers will not be applied.

Exercises

Ex.1. Answer the following questions:

1. What is a laser?
2. When was a laser produced?
3. In what areas of medicine are lasers used?
4. Are there many types of lasers?
5. How many types of lasers do you know?

Look through the text.

ROBOT HELPS REMOVE TUMOR

Long Beach, California. A robot arm the size of a kitchen mixer, described as safer and more accurate than a surgeon’s hand, has helped doctors remove a tumor in what is believed to be the first application of robotics in human brain surgery.

The three-hour operation was performed on a 52-year-old man at Memorial Medical Center of Long Beach. Dr. Yik San Kwob, who developed the computer program that makes the arm work, said the machine would never replace a surgeon but was a major improvement in the way brain tumor are located and removed.

The arm holds a probe that guides the surgeon through a hole drilled in the patient’s skull and down a narrow tube to the tumor. The patient’s head is held in place by a frame that contains the coordinates of the tumor. The robot is accurate to within 1/2000 of an inch.
Exercises

1. Arrange the following sentences in proper order to make a summary of the text:

   1) The machine would never replace a surgeon but a major improvement in the way brain tumors are located and removed.
   2) A robot arm has helped doctors remove a brain tumor in what is believed to be the first application of robots in human brain surgery.
   3) The robot arm holds a probe that guides the surgeon.
   4) A computer program makes the robot arm work.

2. Review the text. Answer the following questions:

   1) What branch of surgery is the robot arm applied in?
   2) What is the size of this robot? How is it characterized?
   3) Can the robot arm replace the surgeon? How is the robot arm made to work? Why is the machine considered useful?
   4) How does the robot arm guide the surgeon to the tumor? How is the patient’s head held in the place? What does the frame contain? How accurate is the robot described in the text?

Read the text.

SPARE PARTS SURGERY

Steady progress is being made toward a medical objective of the highest importance—successful transplanting of life-sustaining organs from one individual to another.

Transplants were pioneered in 1951. For many years, however, the only successful transplants involved identical twins, whose body tissues are alike. When surgeons tried to replace diseased organs with healthy ones from unrelated donors, the recipients’ bodies invariably rejected the foreign tissues.

Then, some years later, Dr. Francis D. Moore reported a case of a man who had lived a year on a kidney taken from a completely unrelated person.

Doctors have learned how, through the use of drugs, to control the body’s tendency to destroy foreign tissue, a part of the body’s defense against disease.

Experiments with animals indicate that some parts of the body such as legs can be preserved by freezing. Other parts can be kept for six hours by cooling them to just above freezing. This may prove to be a modest first step toward eventually solving the problem of obtaining and keeping a supply of spare body parts until needed.

Now kidney transplants are being performed in a dozen of hospitals. Surgeons are beginning to transplant other organs, too. At the University of Mississippi surgeons transplanted a lung into a patient whose own lungs were destroyed by cancer and disease. The new lungs functioned for 18 days before the patient died, ironically from kidney disease.

Doctors contend that even though some patients may die, their survival for a week or so indicates that successful transplants of lungs and livers are not far away. The fact that the liver functions some time after transplant, and in several cases was still functioning well long after the failure of the heart, shows that liver transplants are possible.

At other hospitals, the transplant of limbs, ovaries, pancreas and other organs are under study. Researchers at Cleveland Metropolitan General hospital are even looking into the
remote possibility of eventual nerve or brain transplants. Already they have kept monkeys brains alive for up to 12 hours totally outside the animals’ body.

Doctors are exploring ways to control rejection. Some surgeons irradiate the transplant area with X-rays, and use chemotherapy.

The problem of establishing a supply of organs and other body parts is formidable.

Agree or disagree.

1. Transplants were pioneered in 1951.
2. Dr. Francis D. Moore reported a case of a man who had lived a year or kidney taken from a completely unrelated person.
3. Experiments with animals indicate that some parts of the body such as legs can’t be preserved by freezing.
4. No kidney transplants are being performed in a dozen of hospitals.
5. At other hospitals, the transplant of limbs, ovaries, pancreas and other organs are under study.
6. Doctors are not exploring ways to control rejection.

Useful language:

- As far as I know…
- Without giving details, I’d like to…
- I’d like you to pay special attention to…
- I’d like to specify…
- I doubt that…
- I’m doubtful about…
- I’d like to be less doubtful about…but
- I wish I could believe that…
- It seems unlikely that…
- I’m certain that…

TEXT

The main function of the kidneys is to drain waste matter like uric acid, urea, sodium chloride and sulfate from inside the body. If the kidneys are inflamed or damaged as in nephritis, toxins will accumulate in the body, the blood will become impure, leading to headaches, nervous weakness, backache, palpitations of the heart, etc. Complete kidney failure is fatal. But nowadays there are measures to save such patients. Sometimes doctors perform magic.

HEART RECIPIENT GETS A KIDNEY TRANSPLANT

San Francisco. Doctors have claimed success in transplanting a kidney into a man who has lived for 10 years with a heart transplant and for eight years with steel hips.

Louis Bonesio, 51, underwent the kidney transplant at the University of California, San Francisco. Dr. Nicjlas Fedisca said that Mr. Bonesio was the only person alive with two organs transplanted from two donors.

Doctors said that both transplants were necessary because of separate diseases.
Exercises

1. Make up sentences of your own using the following words and phrases: the main function of, to drain waste matter, uric acid, urea, inflamed kidneys, toxins accumulate, impure blood, to lead to, headache, heart palpitation, weakness, to transplant a kidney into stainless steel, to undergo, only person alive, separate diseases, because of.

2. Select facts in the text to support the following statements:
   1) The state of health depends greatly on the work of the kidneys.
   2) People may live with several transplants from different donors.

LIVER TRANSPLANTS

Liver transplantation has not aroused the sensational publicity focused on heart grafting. Yet since Dr Thomas Starzl, now at the University of Pittsburgh, pioneered the operation 18 years ago (1963), over 200 livers have been transplanted in the United States. One of Starzl’s patients has lived over 12 years after transplantation, and of his female ones have given birth to normal children. In a British programme of liver transplants doctors at Addenbrook’s Hospital, Cambridge, and King’s College Hospital, London, report that the one-year survival rate during the past 21 months exceeded 50 per cent.

In both programmes, use of an experimental drug, cyclosporin A, has apparently helped to improve recent survival rates and has allowed lower doses of steroid hormones, which are given to prevent rejection of the new organ. One must know that high doses of steroids are particularly harmful to children because they inhibit growth. The treatment of children with bile-duct malformation has been an important part of Dr Starzl’s programme.

Although the operation remains very difficult, liver transplantation gives a chance of excellent rehabilitation for patients who have no treatment alternatives.

Exercises

Answer the following questions:

1. Has liver transplantation aroused publicity?
2. Who pioneered liver grafting (transplantation)? When?
3. What is the liver transplantation survival rate?
4. What has apparently helped to improve survival rates in both programmes?
5. Why are steroid hormones given after liver transplant operations?
6. Why are steroids particularly harmful to children?

Read the Text.

METHODS USED IN CARDIOSURGERY

In performing the operations on the contracting heart there is danger of the impairment of cardiac function and partial arrest of blood circulation, resulting in the damage to some organs, brain cells in particular.

Such danger is eliminated when artificial blood circulation apparatus called heart–lungs is used during the operation. By using the artificial blood circulation apparatus the heart is excluded from the blood circulation and the surgeon is able to work on the “dry” heart for a longer period of time achieving better results.

Hypothermia is another method used in heart operations. When the patient is under hypothermia the surgeon can eliminate congenital or developed heart defects without the loss of the patient’s blood during the operation.
The method of occlusion consists of bandaging all the vessels carrying blood to and from the heart just before making an incision on the cardiac wall. When the method of occlusion is applied the surgeon evacuates from the heart that amount of blood which is inside its cavities (in the adult it is about 100 – 150 ml) and performs the necessary operation to eliminate the cardiac defect.

**Which of the described methods have you got interest in?**

**Choose the answer corresponding to the texts:**

1. How is the danger of the partial arrest of blood supply eliminated during heart operations?
   - A) It is eliminated by using hypothermia;
   - B) It is eliminated by using artificial blood circulation apparatus.

2. What vessels are bandaged when the method of occlusion is employed in heart operations?
   - A) The portal veins are bandaged;
   - B) All the vessels carrying blood to and from the heart are bandaged.

**Put questions to the text (special and general)**

**CARDIOSURGERY**

Within the last 20 years a new branch of surgery – cardiosurgery has been developing successfully in our country. The beginning of its development was marked by the first operation on the heart performed by Academician A. N. Baculev. It is due to the work of such prominent Soviet surgeons as Vishnevsky, Meshalkin, Petrovsky, Amosov, and others that great progress has been achieved in cardiosurgery. The lives of many thousands of people suffering from cardiac diseases and from those of coronary vessels have been already saved.

The operations on the heart are performed to eliminate the existing heart defects, congenital or developed, and to restore the normal function of the heart.

The operation on the heart is preceded by various examinations, which enable the surgeon to make a correct diagnosis. The most important ones are listening to the heart, its X-rays examination, electrocardiograms, the revealing of heart murmurs, and clinical and biochemical blood analyses. Only having made an exact diagnosis and having come to the conclusion that the therapeutic measures have been ineffective the surgeon can perform the operation on the heart.

The operations on the heart are very difficult to perform because of the intricate anatomical structure of the heart constantly contracts.

Some operations are performed on the contracting heart, but such operations give the surgeon only a very short period of time for his surgical manipulations. Besides in such cases there is always the danger of the impairment of cardiac functions such as heart failure, fibrillation and others. In the presence of these impairments complete or partial arrest of blood circulation develops.

Such intervals of blood circulation result in the damage to some organs, for example, the brain can live without blood supply only four-five minutes; it the intervals is longer the brain cells die.
GENERAL ANAESTHESIA

General anesthesia produces a state of unconsciousness associated with general loss of sensation, including of course the loss sensibility to pain. Usually the induction is by inhalation, but may be by intravenous or rectal administration of the anaesthetic agent. The principles governing the administration of general anaesthetic agents have advanced remarkably during recent years in the Soviet medicine. The trained anaesthesiologist is not satisfied with merely keeping his patient under the influence of the anesthetic, as was formerly the practice, but endeavors to induce and maintain a light, even surgical stage of anesthesia during the entire operation.

The anaesthesiologist is required to assume great responsibilities and should acquire a thorough knowledge of the methods of anesthesia and how to handle patients. In this connection it should be emphasized that patients awaiting operation frequently and needlessly are alarmed by a careless or thoughtless remark made by the attending hospital corpsman. This is especially true in the operating room during spinal anesthesia and the early stages of general anesthesia while the patient is still conscious. At such times his hearing is often very acute, and he is likely to hear conversation concerning his condition which might cause him needless anxiety and add to the risks of the operation. The responsibility of the anaesthesiologists does not terminate upon completion of the operation. He is directly responsible for the patient during his transportation from the operating table to his bed and until properly relieved by a competent attendant.

TASK

Here are some extracts from an article in the British Medical Journal given in the order that they were read. Try to identify them to work out the procedure used and suggest a suitable title.

a) The practice of preoperative assessment in 24 departments of anaesthesia in Great Britain and Ireland was surveyed. Most departments had no rigid policies governing assessment, and many served several hospitals. There was little evidence that admission procedures of patients scheduled for surgery organization of operating lists took account of the problems encountered by anaesthetists undertaking preoperative assessment.

From the participating departments 415 anaesthetists completed a questionnaire of their individual practice. Most (57%) visited at least 80% of their patients preoperatively, but 22% saw less than 50% of patients. The direction of potential anaesthetic problems and the establishments of rapport with patients were highly rated reasons for conducting such visits. Failure to visit was often related to organizational defects within the hospital service, and anaesthetists saw little prospect of improving these defects. The demands created by the needs of preoperative assessment on the one hand, and the need for a rapid turnover of surgical patients and financial stringency on the other, conflict, and this conflict is not easily reconciled.

b) There have been public expressions in the press of disquiet regarding the lack of preoperative assessment; patients may understandably prefer to meet their anaesthetist, though this study did not seek to explore this. Besides the press, society as a whole expresses its will through the courts. The defence organisations have settled claims on behalf of surgeons when failure to conduct preoperative assessment has been implicated.
and the same logic could be applied to anaesthetist. There is, however, an obvious conflict between the desire for a rapid turnover of cases, with a short interval between admission and surgery, and the desire for effective preoperative assessment. Patients not previously seen can be assessed in the theatre suite, imperfect though this may be, but if the solution sought is that every patient should be visited preoperatively by an anaesthetist this may be costly and pose organisational problems. If the solution sought is that every patient should be seen by his own anaesthetist this will cause considerable difficulties; the need will have to be demonstrated very clearly and changes made in hospital routine. Patients will have to be admitted to hospital earlier, operating lists definitively published at longer intervals before their scheduled time, and communication between anaesthetist and surgeons improved. This survey suggests that anaesthetists are not optimistic about the possibility of allocating more resources to achieve such changes, no matter how commendable they may be. We consider that

anaesthetists have judged the situation well, and we do not consider that any solution that costs more is justified, particularly in a climate that demands ever increasing value for money in the health service. We cannot have the best of both worlds. Limited resources mean limited services, and, although we hold differing views about preoperative assessment, we are united in the view that society as well as the profession must decide what solutions, if any, should be imposed.

c)

**TABLE VI — Value of aspects of preoperative assessment**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Mean</th>
<th>Coefficient variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detect potential anaesthetic problems</td>
<td>8.8</td>
<td>18</td>
</tr>
<tr>
<td>Establish rapport</td>
<td>7.9</td>
<td>24</td>
</tr>
<tr>
<td>with patient</td>
<td>7.4</td>
<td>31</td>
</tr>
<tr>
<td>Allay patient’s</td>
<td>7.2</td>
<td>35</td>
</tr>
<tr>
<td>anxiety</td>
<td>7.1</td>
<td>34</td>
</tr>
<tr>
<td>Plan anaesthesia</td>
<td>6.9</td>
<td>36</td>
</tr>
<tr>
<td>Prescribe</td>
<td>6.4</td>
<td>41</td>
</tr>
<tr>
<td>Premedication</td>
<td>6.0</td>
<td>46</td>
</tr>
<tr>
<td>Explain anaesthesia</td>
<td>5.7</td>
<td>52</td>
</tr>
<tr>
<td>Review or order</td>
<td>4.6</td>
<td>68</td>
</tr>
<tr>
<td>investigations</td>
<td>3.4</td>
<td>76</td>
</tr>
<tr>
<td>Detect missed pathology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job satisfaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicogal considerations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Explain surgery</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*10 = utmost important, 0 = irrelevant.

d)

In 1978 the Association of Anaesthetists of Great Britain and Ireland received a grant from the Nuffield Provincial Hospitals Trust, which funded an inquiry into the mortality associated with anaesthesia. Of the patients in that study, 8.8% did not receive a preoperative examination, suggesting that throughout the United Kingdom 300 000 patients were anaesthetised each year without previously meeting their anaesthetist. This attracted considerable publicity. At least one book has been published discussing the preparation for anaesthesia, but few reports describe actual practice. Our study investigated the practice of preoperative assessment by anaesthetists in Great Britain and Ireland.

e)

JOHN CURRAN, ANDREW T CHMIELEWSKI, JILL B WHITE, ALAN M JENNINGS

f) **References**


| Earlier availability of investigations | 6-7  | 41 |
| More cooperation from surgeons         | 6-4  | 44 |
| Outpatient assessment                  | 5-9  | 49 |
| Questionnaire completed parent         | 5-1  | 60 |
| Questionnaire completed                | 4-9  | 62 |
| Longer admission to anesthesia         | 4-9  | 62 |
| More anaesthetic staff                 | 4-7  | 70 |
| Decreased surgical                     | 4-3  | 74 |
| More cooperation from                  | 3-5  | 85 |

*10 = utmost help, 0 = no help at all.

**TABLE VIII — Value of suggested methods of facilitating preoperative assessment**

<table>
<thead>
<tr>
<th>Method</th>
<th>Visual Mean</th>
<th>Coefficient variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earlier notice of surgical</td>
<td>7-3</td>
<td>38</td>
</tr>
</tbody>
</table>

12
How do the statistics given in the Abstract compare with the situation in your country?

Read and translate the text without the help of dictionary.

FREE READING SYRGERY

Treatment of injuries or diseases by operative techniques is the subject of surgery. The surgeon has always been an integral part of medical science, early medical texts are devoted chiefly to records of surgical cases. Strangely, however, the great advances in surgery have been dependent on medical discoveries in other fields. These advances include the discovery of ether anesthesia by Morton and Long in 1847; the discovery of the principle of antisepsis by Joseph Lister in 1865-87, and an application of rubber gloves introduced by Halstead. The use of blood transfusion, the control of fluid in the body and the use of drugs for various symptoms have also aided success in surgery.

Many years have passed since the time when few surgeons dared to invade the interior of the abdomen.

Today every portion of the human body has been invaded successfully. The surgery of today is called physiological surgery and is aimed at restoring normal function of various organs and tissues when these functions have failed.

Translate the text with the help of dictionary and retell it.

OPERATION A HUNDRED YEARS AGO

...Obviously Dr. Mayo did not operate in a well-ordered world of men in white. His was "kitchen surgery". The theatre was usually the patient's home, the operating-table one from the kitchen or the parlour sofa, or even a door taken off its hinges and laid across two saw-horses. The room was seldom large enough and Dr. Mayo often refused to permit the presence of anyone but those who were helping him.

Modern men accustomed to strict asepsis in operative routine and surroundings can scarcely credit the stories of pre-antiseptic methods, stories of men who operated in whatever shirt or coat they happened to be wearing, covering it perhaps with a linen duster or an apron stiff with the stains of previous operations; who stopped their knives on the soles of their shoes before they began and while using one knife held another ready between their teeth; who economized on water that had to be carried in from the well by squeezing the blood from the sponge instead of washing it out; who washed their hands after and not before the operation.

Word of the work of Pasteur and Lister was getting around by 1880 but more as the story of an outlandish fad than as a report of scientific truth. Microbes still belonged to the realm of fantasy, and the concept of cleanliness was still beyond the comprehension of most men.

As for cleanliness of instruments, sponges, towels - well, wasn't it rather silly when the operation itself was so messy. Little is known specially of Dr. Mayo's methods. Being fastidious in dress and person he may have kept his few instruments fairly clean, free at least of dried blood between operations, but they were certainly not sterile. Some of them he carried in a little case or even loose in his vest pocket where he could reach them easily to lance a boil or clip the ragged edges of a minor wound.
He may have removed his long black coat for the task to allow himself greater freedom of movement or to save the garment from soiling. But perhaps he shared that peculiar sense of value which made it matter of pride for the surgeons to perform an amputation without spotting the whiteness of shirt cuff or front. It is said that Henry J. Bigelow of Boston, one of the nation's ablest surgeons at that time always operated in a well-valeted dark blue coat with a rose in the buttonhole.

What facts from Pirogue’s life have impressed you most of all?

RUSSIA’S FIRST SURGEON

There is a story by Alexander Kuprin about Nikolai Pirogov, the brilliant 19th century Russian physician, surgeon, scientist and thinker. Entitled “The Wonderful Doctor” it ends with the words, "...Everything great, powerful and sacred that lived and scintillated in that wonderful doctor passed away with him for ever.

The author was wrong. Pirogov lives on in the grateful memory of mankind, which these days is marking his 175th birth anniversary.

A SCIENTIST OF GENIUS

On August 3, 1897, just before the opening of the International Surgeons’ Congress in Moscow, a monument to Nikolai Pirogov, and the first ever memorial to a scientist in Russia was unveiled in Tsaritsynskaya (now Pirogovskaya) St., in the presence of the Congress’ participants, among whom were some of the most illustrious names in Russian and European surgery. Also thousands of Muscovites were present. The carefully preserved monument can still be seen there, standing in close proximity to many leading Soviet medical institutions.

Nikolai Pirogov was called a scientist of genius even in his lifetime. His career as a researcher, excellent surgeon and clinician was tempestuous. At 18, he graduated from Moscow University; at 22, he became a Doctor of Science; at 26, he was a Professor at Derpt (now Tartu) University, one of the largest in Europe, and at 30, he headed Russia's first field surgery clinic. During his first 30 or so years in surgery, he started a new trend in the study of human anatomy and physiology, based on fundamentally novel methods. His major research works in this field contributed enormously to world science. To this day, Pirogov methods are among the basic methods in the study and teaching anatomy.

Pirogov’s truly historic significance lies in the fact that he laid the foundation for the development of Russia’s surgery along the lines of natural materialism, viewing a human organism in its entirety, as a single whole. For more than a hundred years now this approach has been the loadstar in the successful development of our surgery, both theoretical and practical.

A LIFE OF DEDICATION

It is no exaggeration to say that Pirogov’s life was an exploit. He was a field surgeon during four wars (in the Caucasus in 1847, in the Crimea in 1854, in the Franco-Prussian war in 1870, and in the Russian-Turkish in 1877), selflessly saving the lives of the wounded in the most difficult of conditions.

He in fact created a new medical science, field surgery, and suggested new, rational principles for the grouping, distribution and evacuation of the wounded. His work, Fundamentals of Field Surgery (1864), had soon become a reference book for field surgeons in all countries. He formulated
some of the most important principles of treating gunshot wounds, fractures, shock and wound infections, and developed the most ingenious methods of performing operations.

He was also the first to apply, on a large scale Plaster-of-Paris bandages in field conditions (in Sevastopol, during the Crimean war), which was a revolution in field surgery. Almost 90 years later, during the Great Patriotic War, the Pirogov plaster of Paris was still widely used during the heroic defence of Sevastopol, and on all other fronts, helping save the lives of many thousands of Soviet soldiers.

Pirogov had a phenomenal capacity for work, which enabled him to do a great deal in all spheres of surgery. He also developed classical, world-acknowledged methods of operations and treatment in ophthalmology, urology, and other fields. Many of those methods are applied even now, and one of them, the so-called Pirogov amputation (a conservative-restorative operation on the extremities), marked the beginning of osteoplasty, giving a powerful impetus to the development of reconstructive surgery.

Genuinely compassionate with the sick and the wounded, Pirogov spared no effort to find ways of relieving their suffering. He was among the first to realize the importance of general anesthesia and to apply narcosis, doing all he could towards its introduction into surgery. He firmly believed that narcosis not only relieved pain, but created the optimum conditions for keeping up the patient's vital functions during an operation. Today, when long and superlong operations are performed (in microsurgery they may last for 18 to 20 hours), and when the most complicated reconstructive surgery of the heart, the lungs and other organs is practiced, new methods of anesthesia are being developed which keep in mind this perspicacious idea of Pirogov's.

**PREVENTIVE MEDICINE**

Pirogov was most emphatic about the need to closely link science and practice, and to see that new medical means and methods were introduced as quickly as possible. Such an approach has a special ring in our country today, at a time when an accelerated scientific and technological progress is our first-priority objective. Of much interest in this context is also Pirogov's view of the role of universities in the country's life. He considered that universities must not only be centres of training and research, but must absolutely take into account the specific conditions and, most importantly, their particular region's requirements.

Nikolai Pirogov was the first man in the world to proclaim disease prevention an all-important task of medicine. “The future,” he wrote, “belongs to preventive medicine.”

For many years, Nikolai Pirogov lived in Vishnya, a small estate near Vinnitsa, in the Ukraine, and after his death, he was buried there. The place is now the site of the Pirogov Estate-Museum, and a veritable Mecca of surgery. People from all over the world come here to pay homage to the memory of the great Pirogov.

Igor BOGORAD

ЛІТЕРАТУРА