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ИЗБРАННЫЕ ЛЕКЦИИ ПО ВНУТРЕННИМ БОЛЕЗНЯМ ДЛЯ СТУДЕНТОВ-МЕДИКОВ. ЧАСТЬ 1. ВВЕДЕНИЕ. РАССПРОС И ЖАЛОБЫ БОЛЬНОГО

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РЕЗЮМЕ. Данная публикация открывает цикл авторских лекций, посвященных вопросам пропедевтики внутренних болезней, в первую очередь – на материале сердечно-сосудистой, эндокринной и бронхолёгочной патологии. Пропедевтика толкуется авторами широко, как введение во внутреннюю медицину, поэтому лекции содержат и терапевтический, и клинико-патофизиологический материал. Лекция сопоставляет достижения и традиции отечественной терапевтической школы с принципами преподавания внутренней медицины, сложившимися в практике зарубежного медицинского образования. В первой части рассматривается методология общения врача и пациента, сбора анамнеза и интерпретации жалоб пациента.

КЛЮЧЕВЫЕ СЛОВА: Анамнез; Бронхолёгочные заболевания; Врачебные ошибки и халатность; Жалобы больного; Коммуникативные навыки врача; Личность пациента; Общение врача и пациента; Сердечнососудистые заболевания; Физикальное обследование

SELECTED LECTURES IN INTERNAL MEDICINE FOR M.D. STUDENTS. PART I. INTRODUCTION. PATIENT INTERVIEWING AND COMPLAINTS

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ABSTRACT. This publication opens a series of authorial lectures devoted to questions of Propaedeutics of Internal Diseases, primarily based on the material of cardiovascular, endocrine and bronchopulmonary pathology. Propedeutics is widely interpreted by authors as an Introduction to Internal Medicine; therefore, these lectures also contain clinical pathophysiological material. The lectures compare the achievements and traditions of Russian traditional therapeutic school with the principles of Internal Medicine that have evolved in the practice of foreign medical education. The first lecture is devoted to doctor-patient communication as regards to patient's interview and complaints interpretation.

KEYWORDS: Anamnesis; Cardiovascular Diseases; Communicative skills; Doctor-Patient Communication; Malpractice; Patient's Complaints; Patient interviewing; Personality; Physical Examination; Pulmonary Diseases.

> «The road to a clinic goes through the pathologic museum; and not through the apothecary's shop» Sir William Whitney Gull, baronet (1816–1890)

PREFACE

Authors created these lectures based on their personal 50 year- clinical and 35 year- pathophysiological experience. 35 or

50 years is not a very long term. St. Petersburg was founded 314 years ago. Today students from many countries come here to study an array of disciplines, including Medicine. The field

of Medicine has become international, and there is no national Medicine, as well as there is no national Mathematics or national Physics. Medicine is based on international laws of natural sciences. Every time a medical doctor checks the arterial blood pressure from one of his or her patients, this physician (in any country of the world) applies the achievements of different national medical schools. This is plain medical fact, because the mercury sphygmomanometer devise for this purpose was invented by an Italian doctor Scipione Riva-Rocci (1863-1937). the stethoscope used for this procedure was invented by a French physician Rene-Theophile-Hyacinthe Laennec (1781-1826) and the physiological phenomenon of specific murmurs heard for arterial blood pressure check was discovered by a Russian surgeon Nicolai Sergeievich Korotkov (1874-1920). All that made it possible to control arterial blood pressure in clinics non-invasively. Therefore, in a simple medical procedure, the achievements of three different national medical schools are combined, and the same principle applies in other areas of Medicine [40]. After the years of medical teaching, consulting and research in Russia and few other countries, with experience of having medical and dentistry students from almost 70 different states, we do believe that the principles of medical education are similar all over the world.

In our current teaching, at the Medical Faculty of Saint Petersburg State University, we subscribe to the principles of early patient contact of the students, full integration between the Basic Sciences and Clinical Medicine, and the intermingled interdisciplinary approach that combines the concepts and findings taken from different medical disciplines.

Although the Science of Medicine is similar worldwide, the sphere of Health Care still is divided with national borders and has pretty much of specifics in every country, with their different legislations, standards, traditions, mentalities and cultures. Even in the epoch of globalization this should be taken in account by international medical students and medical doctors, traveling for employment [34]. The phenomenon called 'white thrombus" on this side of English Channel, is called "platelet plug" in Britain and all its former colonies. It does not mean that medical doctors living on particular shore of the sea are more (or less) sophisticated. However, it means difference in their thesaurus and their traditions.

The main foundation for clinical reasoning is a clinical language. Nevertheless, this great pre-requisite of medical professionalism is not identical in different countries and even in the same country, but within the various specialties and occupations of Medicine [5-6]. In order to improve the performance of international medical students and make the tasks of the guest physicians easier, we have composed this cycle of lectures both for Russian and Foreign readers, persuading the goal to acquire and apply medical skills globally.

More than three centuries ago, the Tsar of Russia, Peter the Great, has founded the city of St. Petersburg and - a bit later (1724) - also our University. His idea was to create a place, which was suitable for hybridization and interaction between the Russian mind and spirit and European culture. That is why today, Saint Petersburg is probably the right place to study Medicine. Here you can combine the achievements of Russian and European cultures, with fundamentals of Russian and international Medicine. The University puts together the intellectual efforts and creative potential of many people of different ethnic origin. The authors wish you success on your way to medical professionalism and good achievements in future career of physician. In order to accomplish this goal contemporary medical doctor has to be a multilingual person. Let the words of famous English physician Dr. W.W. Gull, opening the text of lectures as an epigraph [43], accompany you on your way.

ROLE OF PHYSICAL EXAMINATION IN DIAGNOSIS

The modern medicine, although armed with many instrumental and laboratory methods, is not able to establish the correct diagnosis without taking into account the results of direct oneto-one conversation between a doctor and a patient, because there is no instrumental or laboratory screening method, which can entirely substitute it. Current literature recognized that and even emphasized the negative impact of the rapid development of telemedicine and electronic data recording in health care on doctor-patient communication [45, 49]. Medical schools of different countries introduced in late XX - early XXI century early patient contact as a kind of useful innovation for their system of medical education [39, 44]. For Russia, however, it is not an innovation. but a firm element of traditional basis of teaching physicians, a corollary of so-called N.I. Pirogov's three-step system of clinical medical teaching, a principle elaborated in XIX age by S.P. Botkin and G.A. Zakhar'in [12, 28].

Moreover, it is not possible to use in full scale the results of instrumental and laboratory probing itself not analyzing the results of direct interaction with a patient.

First contact with patient proceeds during an interview taken by doctor. To take patient's interview ("to collect anamnesis") is a matter of great proficiency. The goal of this interview is to obtain maximal information concerning the patient. This is to be resulted from relatively short dialogue, in order to construct mentally the appropriate conceptual model of a concrete case of disease and suggest diagnostic proposals.

The beginners of medical practice sometimes fail to reach this purpose even in the end of a prolonged intercourse.

However, the experience like this is vital for a doctor because it lays the fundament of "first glance diagnosis" art for all future, more adept practice. To establish correct diagnosis after the first glimpse demands doctor's gift and immense experience of everyday work.

When a doctor interviews the patient for the first time, the most essential thing is to provoke patient's frankness in order to complete the comprehension of patient's personality, aspiration to recuperate, and compliance to be treated. It helps to understand either a patient is alarmed with his/her status and plays important part in complex treatment due to its benign psychotherapeutic ef-

The questioning of the patient's complaints is considered to be the most intricate and difficult part of medical interview, but at the same time a crucial one. In a majority of cases, the key role in disease distinguishing belongs to patient's complaints. This classical point of view expressed long ago in G.A. Zakharyn's trope: "Anamnesis if correctly taken is a half of diagnosis" [15], which became proverbial among medics and has been repeatedly confirmed by later special studies [41].

For the freshmen of medical practice it is vital to beware of hasty questioning and rushed examination, which often may cause a wrong guesses about the disease.

The questions a doctor put is to be clear for a patient of any intellectual and educational level. It is important for the avoidance of wrong and ambiguous answers.

Not any patient's answer should satisfy a doctor, but only earnestly clear, competent and unequivocal. It is malpractice of a doctor to append the characters, not named by a patient him/herself, into the list of symptoms. Otherwise, doctor may implant into patient's head the symptoms of a disease, physician mistakenly suggested at first glance.

Doctor never should accept for diagnosis desirable things instead of real ones. During the initial steps of diagnosis, establishing the false tentative diagnosis is not exclusion. This situation is not dangerous. The real danger is to put involuntary this false point of doctor's view into patient's mind. Because of this, you may arise the patient's suspicions of symptoms, which he/she, in fact, does not have. The hypnotizing style of interviewing should be carefully avoided.

In medical practice commonly, three kinds of diagnosis are in use: Provisional, main and final. They reflect the separate cognitive steps of the diagnostic process, which is not a magic procedure, but just a kind of recognition.

Provisional (or preliminary) diagnosis is established during first appearance and initial patient examination, starting from the first questioning. At this point, the reliability of diagnostics is doubtful because the doctor still has not enough information about the patient. Of course, there is a long row of cases, when even the provisional diagnosis is correct and already well established.

The main (or clinical, detailed diagnosis) arises as a result of dynamic observation and patient's investigation, by means of analysis and synthesis of numerous pathologic symptoms and distinguishing procedure, made in doctor's thoughts.

The rules, accepted by physicians globally, require defining this diagnosis, if possible, during first three days of patient

The final (or firm, conclusive) diagnosis is established by medical doctor after repetitive examinations and on the base of treatment results, on the final stage of patient observation or in connection with patient's death and autopsy (postmortem).

In some cases, the diagnosis may be established only as a result of prolonged observation. This diagnosis is called retrospective.

INTERVIEWING A PATIENT

The first medic who paid much attention to patient interview and wrote special recommendations on this matter was probably ancient Greek physician Rufus of Ephesus (1st century A.D.) [47].

The questioning is an important and difficult diagnostic method, most hard among all of them, as emphasized classic of Russian Medicine M.V. Yanovsky [38]. To acquire this skill, a doctor must strive to improve his/her proficiency and cultivate her/his abilities

You may auscultate your patient by means of stethoscope, but it is more important merely listen to him/her by ears and calm the patient down [13].

The lower is the doctor's proficiency level; the less he/she speaks to a patient. The patients use to narrate the same their diseases unequally to different doctors. The greater is the doctor's experience, the more data he/she obtains by means of patients interviewing.

The great Russian physician and clinical pathophysiologist Sergey Petrovich Botkin used to underline the role of "certain dominant idea" governing the anamnestic facts collection [7].

Usually the patient starts with complaints, which are principal in his/her opinion, but objectively these are not always the foremost ones. That is why it is incorrect to listen passively to the patient's complaints. Active questioning is utmostly recommended.

Thus, the interview consists of two parts: Passive one with spontaneous patient's narrating and active one - with skillful professional doctor's questioning.

The most considerable part of the interview is the anamnesis. Anamnesis is a patient's remembrances concerning the onset and development of the disease, as the patients him/herself interprets it. Anamnesis consists of unconstrained patient's narrating about the beginning and progress of the disease and targeted doctor's questioning. During anamnesis talking, the doctor appreciates meaningful and inconsiderable information in patient's story, at the same time observing patient's neuropsychological status.

Hence, the questioning is a process which must be planned and organized by physician. It takes usually more time, than certain other kinds of diagnostics. However, doctor should never save time at the expense of anamnesis [14].

Not infrequently, during subsequent clinical managing the necessity of returning to anamnesis arises several times: In order to add something, or reach proper exactness or re-estimate some data.

The common therapeutic mistakes in the anamnesis gathering are the following:

- Underestimation of the complaints' character;
- Misjudgment of the difference between the onset and exacerbation of the illness;
- Neglecting of epidemiological, pharmacological and immunological anamnesis;
- Living conditions and family/sexual matters miscalculated.

After the complaints' clarification and "anamnesis morbi et vitae" detailed collection, doctor proceeds to objective investigations.

OBJECTIVE EXAMINATION

The basic objective investigation methods at physician's disposal are the following: Examination, palpation, percussion, auscultation and the checking of certain specific symptoms, dependent on the concrete disease.

The development of medical science and health industry only gives the possibilities to amplify the simple physical methods, comprehend them by means of instrumental approaches, which, undoubtedly, improve the quality of diagnostics.

Yet, it is accounted, that all the modern achievements in cardiologic laboratory and instrumental diagnosis, although they are in fashion up to now, contribute only 10% of diagnostic value, while the old simplest physical methods, beginning with questioning and ending with just auscultation, contribute 90% of diagnostic value.

Usual physical methods are often more revealing than instrumental ones; the main thing is to acquire them properly. It requires habitual, serious and prolonged training and hardly can be accomplished distantly. That is why there is no legal M.D. programmes based exclusively on distance learning: You cannot become physician by correspondence.

DIAGNOSIS OF CARDIOVASCULAR DISEASES

The recognition of cardiovascular diseases also starts with patient's questioning. At first, doctor has to reveal the character of complaints.

The list of main cardiovascular patient's complaints includes:

- Breathlessness (dyspnea);
- Cardiac and retrosternal pain;
- Palpitations:
- Pulse intermissions:
- Bloody expectoration (in some cases);
- Feeling of heaviness in right subcostal area;
- Oedemata:
- Dyspepsia;
- Easy fatigability, reduced work capacity:
- Erythrism, sleep-wake disorders;
- Headache and vertigo (often);
- In some cardiovascular diseases patient may have elevated body temperature, pain in low extremities on and after walking (intermittent claudicating) etc.

BREATHLESSNESS

Breathlessness (or dyspnea) - the breath disorder, distressing for patient. In cardiac patients, dyspnea is a manifestation of circulatory insufficiency. It may be of various severity, graded. That's why, it is necessary to reveal when and under which conditions it arises in a patient (e.g.: In rest state, on walking, on running, on going upstairs, on climbing a hill or, finally, during arduous exercises, physical work or in certain sports training).

Ask, if the patient gets relief in some specific posture/position. The doctor needs to know is the breathlessness permanent or intermittent, setting in with attacks, is it accompanied with the sense of fear.

The dyspnea in heart failure is caused by hypercapnic, hypoxemic and other influences on the integrative brain respiratory center.

The most severe dyspnea is that of rest state, when a patient may suffer from it even staying in bed. Dyspnea is common for valve disease patients, particularly in mitral stenosis, but also occurs in atherosclerotic cardiosclerosis, pericarditis, myocardial infarction and other cardiac diseases, e.g. cardiomyopathies.

Commonly, the breath shortness in cardiac diseases is of inspiratory (Traube's1 dyspnea) or mixed type. Dyspnea is both objective and subjective symptom. The extreme severity of dyspnea may force a patient keep a sitting position, holding some support with his hands in order to bring the additional respiratory musculature in action (constrained posture).

Dyspnea is brought in by congestive disorders in lesser circulation, which deteriorate the blood gases exchange and impair the blood arterialization by the lungs, hampering the blood flow in greater circulation.

As a result, growing blood levels of carbon dioxide and metabolic products of incomplete oxidation overexcite the respiratory center. Reflex influence from pulmonary J-receptors and via analeptic elements of sinocarotid zone are also essential. The extreme irritation of the center may decrease its excitability, elevate the threshold of hypercapnic reaction, thus causing Chayne-Stokes ' (tidal) respiration², which is considered to be rather unfavorable for prognosis. Usually it occurs in the nighttime, when sleeping. However, sometimes it is observed in apparently healthy person (in weakness of hypoxic reflex drive from sinocarotid area, as if it happens in sleeping infants or very old people) [35].

Sometimes sudden assaults of breath shortness may occur. These are so-called asphyxia attacks. They should be distinguished from the breathlessness of constant character. The asphyxia may occur in resting state, after exercises or stress as well, more often with time intervals, while sleeping. Permanent dyspnea may serve as a background for the asphyxia assaults. Obesity is associated with such asphyxia episodes in sleep.

The useful questions to the patient suffering from dyspnea will

- If he/she feels some moist gurgling rales in his chest on breathing?
- Does he/she get breath shortness mostly when breaths in or out (or both phases of breathing are hard)?
- Is there any sputum, in particular rusty or with blood expectoration of scarlet color?

The asphyxia attacks of above said kind are referred to as "cardiac asthma". Typically, it is caused by left ventricular pump failure, e.g. occurs in mitral stenosis or other heart disease decompensation, in aortic valve diseases, in myocardial infarction, cardiosclerosis or aneurysm of left-ventricular localization, in

Austro-German ¹ Ludwig Traube. internist pathophysiologist, born January 12,1818, Ratibor in Oberschlesien; died April 11, 1876, Vienna.

² Chayne John, 1777-1836, Scottish physician; Stokes William, 1804-1878, Irish physician.

arterial hypertension of greater circulation (e.g., renal, provoked by acute nephritis or other kidney disease). Sudden asphyxia may accompany the attack of ciliary arrhythmia.

PAINS AND ACHES

The pains in cardiac area are the complaints of great importance. The necessary questions concerning these pains will

- Where do you get this pain?
- Show me exactly where (mind the retrosternal or heart apical localization)
- What kind of pain is it? (Mind the character of the pain: Pang, gnawing, burning, smart, stabbing, piercing, beating, bursting, aching, dull, boring, throbbing, sharp, steady, cramp, spasmodic, cutting, shooting, clasping, dragging, drawing, pressing, dagger-like, straining, tearing, tingling, twinkle, gripping etc.)
- Are the pains accompanied by the feeling of retrosternal squeezing and heaviness or pressure?
- Are they constant or spasmodic?
- Did it come on slowly or suddenly?
- What is the duration of a pain attack?
- Does anything special bring it on? (e.g.: Rest station, excitement, walking, exercises, beginning of meal or satiety)
- Do they occur in daytime or in night, or both?
- Does it spread anywhere else? (e. g.: To left or right shoulder, towards left arm, to abdomen, under left shoulder blade).
- Does anything relieve it? (Any drug, comfortable position, turning right side down or laying on patient's back or his/her tummy, bowed position etc.)

The case history without the detailed description of the character of the pain is invalid. The diligent registration of this sign in all details is very helpful in diagnosis.

Most often, the pains in the heart result from coronary perfusion insufficiency. It is due to ischemia, provoked by permanent or intermittent spasms or occlusion of coronary arteries.

Unfortunately, typical angina pectoris with characteristic spasmodic gripping or burning retrosternal pain (called by patients "squeezing", as a rule with making of appropriate gesture of heart tightening) takes place only when the arterial lumen is already narrowed at least to a quarter of the normal.

Besides the ischemic heart disease, cardiac pain may be a result of myocarditis, pericarditis, endocarditis, aortic aneurysm, for example, in syphilitic mesaortitis, as well as neural disorders. Finally, it may be of noncardiac origin (left dry pleurisy, intercostal neuralgia, herpes zoster, myositis, spinal osteochondrosis, pancreatitis, phrenic hernia, costal fractures, rib or sternum periostitis, tuberculosis, multiple myeloma disease etc).

Sometimes detailed questioning about the character of cardiac pains gives the possibility to establish the correct diagnosis.

For example, the pains in angina pectoris (in Continental Europe preferably called stenocardia) are quite specific. They arise in exercise, in walking, forcing the patients to stop. After stopping the walk, they come down. These pains ("exertional stenocardia") may be provoked by wind, by coming out of a warm chamber in the open air, sometimes it is precipitated by overeating.

More rarely, it comes on in nighttime, when sleeping (rest angina pectoris and Prinzmetal's³ stenocardia).

The pains are usually retrosternal, having, most often, squeezing, and pinching character. Pain may occur as spasmodic attacks and lasts few minutes or about half an hour.

Common pain irradiation in stenocardia is towards left arm and shoulder blade, sporadically to mandible. Resting state or coronary vasodilatation drugs (Glonoin or other nitrates, beta-adrenoblockers, etc) relieve it. Frequently, during attacks the patients are anxious, suffer from death fear and try to lie in bed still, without any movements. The pain in myocardial infarction is just of another kind. It is more intensive and prolonged – lasts for several hours or even days, it does not come down after Glonoin and other vasodilatation drugs. In majority of patients, myocardial infarction follows some physical or negative emotional stress. The patient with the infarction often does not suffer from fear of death and usually can walk. It is a common knowledge that in many cases myocardial infarction was revealed long time after the angina attack, or occasionally - by accidental ECG or postmortem in autopsy. Thus, the patient may sustain through myocardial infarction "on feet". In myocarditis the pain is less pronounced, weak, dull, changeable, usually pressing, pinching, but much weaker than in angina pectoris. In pericarditis the pain is durable and varies in intensity; some postures (e.g. halfbowed, sitting with the hands around the knees, lying on the tummy) may relieve it. In endocarditis the pain is, usually, dull and constant, not so severe, as in myocardial infarction or angina pectoris. In aortitis (including syphilitic type) retrosternal pain is permanent, not depending on worry or exercises, resistant to therapy with above mentioned coronary dilation drugs and curable only by narcotic analgesics. "Cardioneurosis" is commonly manifested by durable piercing or vague pain in the heart apical region, without any spread, but provoked by different emotions. In heart disease, pain in the right subcostal area may be a result of the congestion of the greater circulation and liver plethora, leading to extreme distension of Glisson's capsule, rich in pain receptors. Acute pain of extreme severity in the right or left side may arise in thromboembolism of the pulmonary artery and its branches. Cough and bloody sputum expectoration accompanies it.

PALPITATION

Palpitation is a relatively frequent symptom in cardiovascular patients, one of the main complaints. Palpitation is a feeling of abnormally high pulse rate, usually arising in real tachycardia, but sporadically occurring as only a subjective sensation, in

³ Prinzmetal Myron (1908–1987), American cardiologist and numismatist. Special form of stenocardia described by him differs from other cases of rest state angina in that ST-interval on ECG is not depressed, but elevated like in myocardial infarction.

⁴ Glisson Francis — British physician, anatomist, physiologist, and pathologist, born1597, Rampisham, Dorsetshire; died October 14, 1677,

normal or even low heart rate. Commonly, palpitation is related to increased excitability of the neuroendocrine apparatus regulating heart activity. Palpitation may occur in a healthy person, which makes it useful to ask if palpitation arises in any special condition (e. g., in a state of rest, in making efforts, in doing exercises etc., after drinking alcohol, strong tea or coffee, when smoking or being anxious). High temperature, infections and various cardiac diseases may be accompanied by palpitations (e. g. including in congestive heart failure, pulmonary embolism, pancarditis, toxic carditis, myocardial infarction, risk of vascular collapse, thyrotoxic cardiomyopathy, neurocirculatory dystonia⁵). Certain drugs may bring on palpitation. Among them sympathomimetics (Epinephrine, Ephedrin, Alupent, Asthmopent, Euspiran), cholinolytics (Atropine, remedies with Belladonna). The attack of palpitation with heart rate > 160 beats per minute is called paroxysmal tachycardia. The latter may be the result of improper neuroendocrine regulation, cervical spinal disorders, and latent foci of infection, as well as toxic or degenerative cardiomyopathy. The ventricular form is connected with cardiosclerosis and has a less favorable prognosis.

PULSE INTERMISSIONS

Intermissions of pulse are also a frequent complaint of cardiologic patients. Patients may say that their "heart stops or sinks", they may have a feeling of "a lump in the throat." Usually, it is a sign of extrasystoles. The latter may be registered in persons with a delicate autonomous nervous system, but sometimes also present a manifestation of serious heart disease. A regular type of pulse intermissions (like bigeminy) suggests possible overdose of Digitalis.

BLOOD EXPECTORATION

Blood expectoration is a sign of noticeable congestion in the lesser circulation and consequent diapedesis of RBC out of dilated capillaries. Most often it is observable in mitral stenosis, and may occur in the left ventricular failure, or myocardial infarction. The sputum may be either rusty or scarlet. Blood expectoration is typical of pulmonary artery embolism and subsequent lung infarction. Blood expectoration also accompanies some cases of mitral valve disease, myocardial infarction, may appear in thrombophlebitis, erythrocytosis, and pulmonary involvement in periarteriitis nodosa. latrogenic blood expectoration is provoked by indirect anticoagulants in overdosing (Fenilin, Warfarin, Dicumarol). This cause should be excluded by questioning. Blood expectoration may progress to real pulmonary bleeding. Cardiac asthma is characterized by foamy rose-colored sputum, containing a small amount of blood.

EDEMA

Usually, edema accompanies advanced congestion in the greater circulation. A doctor must clarify the localization of dropsy. The most frequent correlations are the following:

- Low extremities advanced heart failure:
- All over the body and extremities dreadfully severe heart failure (anasarca);
- Face it can be renal disorders. The useful questions are:
- When does the dropsy appear?(After walking, at night, in the mornina):
- Does it subside after resting in bed?
- Is the dropsy connected with the hot season? (Some women in menopausal period suffer from leg dropsy in hot weather. The syndrome is associated with systemic leakage of capillaries and hypothalamic disorders, as well as with action of some

The edema may be aggravated by consuming too much salt and excessive drink. Ascites (which is known as abdominal dropsy) is the accumulation of the fluid collected in the peritoneal cavity, which causes complaints of abdominal protrusion, heavy feeling "in the tummy", flatulence, stretching in abdomen. Partly heaviness and distension are caused on by liver swelling and Glisson's capsule strain. In congestion of the greater circulation. we first observe liver enlargement, and later cardiac dropsy may be observed.

DYSPEPSIA

In cardiovascular diseases dyspepsia manifests as sickness, sometimes vomiting. The patients complain of belching (gaseous, or meal eructation), also celiectasia (abdominal distension) may occur. Sometimes it appears as constipation or, vice versa, loose (watery) stools. The circulatory congestion within liver and gut causes these digestive disorders [9].

PATIENT'S GENERAL CONDITION

Cardiac patients may feel exhausted, weak. They complain of easy fatigability. Their work capacity is diminished. Immoderate nervousness is common. Sleep disorder, headaches and dizziness are usually displayed in arterial hypertension, particularly in its "essential" type. This may also be conditioned by meninx swelling and congestion in cerebral circulation. A typical cerebral form of myocardium infarction is manifested mainly by neurologic symptoms. Hypotensive patients regularly suffer from cerebral disorders, particularly depending on weather changes (meteoropathy).

TEMPERATURE ELEVATION

Temperature elevation may be revealed in several inflammatory diseases of cardiovascular system (myocarditis and endocarditis, vasculites of various etiologies). Sporadically, the temperature may be quite high. Ask if the patient has chills or profuse sweating in fever, whether is it accompanied by pain in the joints, how long it lasts, etc.

⁵ "Neurocirculatory dystonia" or "vegetative vascular dystonia" an outdated term, which nevertheless is still in broad use in Russian medical texts, authored by specialists from exUSSR republics. It is never used in English medical literature. The closest correct English equivalent is:Somatoform autonomic dysfunction. Some types of it are qualified by International Classification of Diseases (10th revised edition) as: Panic attacks. We still keep this term in the texts of these lectures, because it is designated for the readers, learning or working in Russia.

OTHER COMPLAINTS

Cardiovascular patients may present a variety of other complaints. Some of them seem, at first glance, unrelated to the heart and vessels. Examples may include:

- Hoarse voice in advanced mitral stenosis:
- Cough in lesser circulation congestion;
- Stomachache in an atypical abdominal form of myocardium infarction and thromboembolism of mesenteric artery;
- Black stools and coffee-like vomits in acute gut ulcer, caused by stress in myocardium infarction.
- Muscular and joint pains and ache in the left side may manifest Dressler's post-infarction syndrome (autoimmune polyserositis-synovitis).

Every complaint must be carefully analyzed and explained in accordance with the other ones. Patients usually tell the truth, with the exception of aggravators. It is advisable for a beginning practitioner to write down the case history in the course of questioning lest he/she should forget some important details. Growing experience will train the memory and allow postponing this process. Tape recording is not a proper aid during an interview, because some patients get too conscious of it, so the attempt of tape recording makes a patient inhibited and less communicable. After the complaints have been acquired, it is necessary to proceed to anamnesis morbi.

That will be the subject of our next lecture. Meanwhile, please find below [1-4, 8, 10-11, 13, 16-27, 29-33, 36-37] a list of literature, recommended for self-studies.

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ЛИТЕРАТУРА

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