

**PLANS AND CHECKLIST TO PRACTICAL TRAINING IN
PROPAEDEUTICS OF INTERNAL DISEASES
FOR 2ND YEAR STUDENTS OF MEDICAL FACULTY FOR
INTERNATIONAL STUDENTS STUDYING IN ENGLISH MEDIUM**

Grodno 2023

Guidelines prepared by employees of the Department of Propaedeutics of Internal Diseases of Grodno State Medical University: Chief of the department Pronko T.P., associated professor Surmach K.M.

Guidelines corresponds to the curriculum on Propaedeutics of Internal Diseases of 01.12.2022 (registration number УД—488/уч).

STUDY №1

Topic: Introduction to the discipline of Propaedeutics of Internal Diseases. Organization of work of the department of Internal Diseases in the hospital. Brief history of the development of the doctrine of internal diseases. Medical ethics, medical deontology.

Control questions:

1. What is Propaedeutics of Internal Diseases?
2. The main aims of Propaedeutics of Internal Diseases.
3. A brief history of the development of the Internal Medicine.
4. Internal Medicine Schools in the Republic of Belarus.
5. Organization of the Internal Medicine department of a hospital.
6. Medical deontology and medical ethics.
7. What are Iatrogenic diseases?

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 3-6, P. 7-14.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 1-30.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №2

Topic: Communications in medicine. Subjective methods to examine patients. General plan to examine patients.

CONTROL QUESTIONS:

1. What is diagnostics?
2. What is disease?
3. Methods to examine patients.
4. General plan to examine patient.
5. Plan of the case report.
6. Identifying (passport) data. What questions do they include?
7. Patient's complaints: chief complaints, additional complaints. Methods for detailing of patient's complaints.
8. History of present illness.
9. The rest of the history. What questions does include the rest of the history?

Practical Skills:

1. History taking.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 15-21.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 1-31, P. 31-61.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students

(English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №3

Topic: Independent work of students with patients. History taking and writing part of case report.

Control questions:

1. Plan of the case report.
2. Identifying (passport) data. What questions do they include?
3. Patient's complaints: chief complaints, additional complaints. Methods for detailing of patient's complaints.
4. History of present illness.
5. The rest of the history. What questions does include the rest of the history?

Practical Skills:

1. History taking.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 15-21.

2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 1-31, P. 31-61.

3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №4

Topic: The general inspection of patient: state of patient, position of patient, mental status (consciousness), expression of the face, inspection of skin, nails and hair, inspection of subcutaneous fat and edema.

Control questions:

1. What do questions include general inspection?
2. State of the patient.
3. Positions of patient and their characteristics.
4. State of mental status (consciousness), the kinds of disturbance of consciousness.
5. What are degrees of depressed consciousness?
6. Altered mental status.
7. Specific face expressions and their characteristics.
8. Inspection of the skin. Changes of the color of skin.
9. Moisture of the skin.
10. Characteristics of nails and hair.
11. The state of nutrition. Subcutaneous fat measuring.
12. Edema. Classification of edema.
13. Determination of edema.
14. Characteristics of cardiac and renal edema.

Practical Skills:

1. The implementation of the general examination of the patient.
2. Evaluation of the patient's state of consciousness
3. Subcutaneous fat measuring.
4. Determination of edema.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 22-36.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 95-122.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №5

Topic: The general inspection of patient: characteristics of muscles, bones and joints. Development and growth, state of nutrition and constitution. Anthropometrical measurements. Palpation of lymph nodes. Thermometry.

Control questions:

1. Types of constitution and their characteristics.
2. The technique of determination the weight, length, chest circumference.
3. Characteristics of muscles.
4. Characteristics of joints.
5. Characteristics of digits.
6. Thermometry. Modern equipment for measuring body temperature.
7. Normal body temperature.
8. Fever, periods of fever.
9. Degree of fever.
10. Types of fever.
11. Lymph nodes. Palpation of lymphatic nodes. Lymphadenopathy.

Practical Skills:

1. Measurement of the weight, length, chest circumference, waist circumference, hip circumference.
2. Determination of body mass index.
3. Calculation of the waist/hip index
4. Determination of constitution type.
5. Palpation of muscles, joints.
6. Palpation of lymphatic nodes.
7. Body temperature measurements.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 36-43.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 95-130, 131-227.
3. Electronic educational methodical guide "Propaedeutics of internal diseases",

specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №6

Topic: Objective methods to examine the respiratory system: static and dynamic inspection of the chest. Palpation of the chest.

Control questions:

1. Reference points and vertical lines, which allow describing an abnormality of the chest.
2. The lungs lobes projection on the chest.
3. Normal shape of the chest.
4. Rate and depth of breathing. Types of respiration.
5. Rhythm of breathing.
6. Palpation of the chest. Technique of the chest palpation.
7. Palpation of the chest. Elasticity of the chest.
8. Tactile fremitus. Technique of the tactile fremitus determination. What is the diagnostic meaning of the tactile fremitus?
9. Determination of the chest circumference, excursion of the chest.

Practical Skills:

1. Methods and techniques for detection of reference points and vertical lines, which allow describing an abnormality of the chest.
2. Methods and techniques for determining the frequency, depth, type and rhythm of breathing.
3. Methods and techniques for determining the shape of the chest.
4. Methods and techniques of palpation of the chest, determination of painful areas, resistance of the chest and tactile fremitus.
5. Measurement of the circumference and excursion of the chest.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 44-53.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 229-240.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №7

Topic: Percussion of the lungs.

Control questions:

1. Percussion. Definition. Physical basics of percussion.
2. The role of the L. Auenbrugger in the development of percussion.
3. Types of percussion and their characteristic.
4. Percussion sounds and their characteristics.
5. General technique of percussion.

6. Technique of comparative percussion of the lungs.
7. Technique of topographic percussion of the lungs. Diagnostic meaning of the topographic percussion abnormalities.
8. The inferior border of the lungs in healthy person.
9. The superior border of the lungs in healthy person.
10. The technique of determination of the diaphragmatic excursion. Normal values.

Practical Skills:

1. General technique of percussion.
2. Technique of comparative percussion of the lungs.
3. Technique of topographic percussion of the lungs.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 53-57.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 240-244.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №8

Topic: Auscultation of the lungs.

Control questions:

1. Physical basis of the lungs auscultation.
2. The role of the René-Théophile-Hyacinthe Laennec in the development of the auscultation.
3. Direct and indirect auscultation, their characteristic.
4. General rules for auscultation. The main technique of auscultation.
5. Classification of the breath sounds, main and adventitious breath sounds.
6. Vesicular breath sounds, mechanism of appearance and diagnostic meaning.
7. Bronchial breath sounds, their characteristic, mechanism of appearance.
8. Bronchophony. The technique of bronchophony. What is the diagnostic meaning of the results of bronchophony?

Practical skills:

1. General technique of the lungs auscultation.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 57-62.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 244-257.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №9

Topic: Objective methods to examine the cardiovascular system: examination, palpation and percussion of the heart area.

Control questions:

1. Inspection and palpation of the neck and heart area.
2. Apical impulse, inspection, palpation and characteristics.
3. Technique of the heart percussion.
4. The borders of the relative heart dullness in healthy persons.
5. The borders of absolute heart dullness in healthy persons.
6. Normal configuration of heart.

Practical skills:

1. Inspection and palpation of heart area.
2. Technique of the heart percussion

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 118-127.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 259-261.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №10

Topic: Auscultation of the heart. Heart sounds.

Control questions:

1. General rules for the heart auscultation.
2. Projection of the valves on the anterior surface of the chest. Places of the valves auscultation.
3. Mechanism of formation of the first and second heart sounds.
4. The differences between the first and the second heart sounds.

Practical skills:

1. General technique of the heart auscultation.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 127-134.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 261-266, 286-294.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №11

Topic: Arterial pulse. Blood pressure measurements.

Control questions:

1. Methods to examine veins and arteries (pulsation, elasticity, pathological findings (dilation or aneurysms).
2. Arterial pulse. Methods of the pulse palpation. Diagnostic meaning of the palpation of different arteries.
3. The characteristics of the pulse (rate, rhythm, tension, volume, amplitude and contour of the pulse wave).
4. Methods of blood pressure (BP) measurement. Korotkoff Sounds. The technique of blood pressure measurement (Korotkoff method).
5. Normal ranges for blood pressure in adult humans.

Practical skills:

1. Technique of the inspection and palpation of vessels.
2. Technique of the pulse palpation.
3. Technique of BP measurement.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 142-153.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 274-281.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №12

Topic: Electrocardiography. Normal ECG.

Control questions:

1. The electrophysiological basis of electrocardiography. Membrane potentials theory of the ECG.
2. The cardiac conduction system.
3. The main electrophysiological properties of the myocardium (automaticity, contractility, conductability and excitability).
4. The electrocardiogram equipment and ECG registration technique.
5. ECG leads.
6. ECG waves, intervals and segments. What does each wave on an ECG represent?
7. ECG axis interpretation.
8. The plan of the ECG interpretation.

Practical skills:

1. The technique of the ECG registration.
2. ECG interpretation.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 158-168.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 267-268.
3. Electronic educational methodical guide "Propaedeutics of internal diseases",

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STUDY №13

Topic: Objective methods to examine the digestive system: examination of the oral cavity, examination of the abdomen, palpation of the abdominal organs. Percussion and auscultation of the abdomen.

Control questions:

1. Examination of the oral cavity and tongue.
2. Abdominal surface anatomy (lines and quadrants). Abdominal circumference measurement.
3. Method of percussion and auscultation of the abdomen.
4. Determination of the lower border of the greater curvature of the stomach.
5. Superficial palpation of the abdomen: methods and techniques.
6. Deep palpation of the abdominal organs.
7. Interpretation of the results of palpation.

Practical skills:

1. Method of examination of the oral cavity, abdomen.
2. Percussion and auscultation of the abdomen.
3. Technique of superficial palpation of the abdomen.
4. Technique of deep palpation of the abdomen.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 273-283.
2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 331-340.
3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovskaya O.V.

STUDY №14

Topic: Objective methods to examine the hepatobiliary system: percussion and palpation of the liver and spleen. Laboratory testing: (bilirubin metabolism).

Control questions:

1. Technique of percussion and palpation of the liver and spleen.
2. Technique of percussion and palpation of the liver and spleen.
3. Laboratory testing: (bilirubin metabolism).

Practical skills:

1. Technique of percussion of the liver.
2. Technique of palpation of the liver.
3. Technique of percussion of the spleen.
4. Technique of palpation of the spleen.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 325-330.

2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 340-347.

3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovszkaya O.V.

STUDY №15

Topic: Objective methods to examine the urinary and endocrine systems. Laboratory testing: urine analysis. Formulas for calculating glomerular filtration rate.

Control questions:

1. Percussion and palpation of the kidneys and urinary bladder.
2. Pasternatsky symptom. Diagnostic value.
3. Palpation of the ureteral points
4. The technique of renal arteries auscultation.
5. Urine collection for analysis.
6. Urine analysis interpretation (color, transparency, odor, density).
7. Urine analysis interpretation: pH, protein, glucose, ketones, bilirubin, urobilinogen.
8. Microscopic examination of the urine analysis (epithelial cells, leukocytes, erythrocytes, cylinders, salts).
9. Methods for determining glomerular filtration rate: calculation according to the Cockcroft-Gault formula and formula of the International Multicenter Renal Disease Study (MDRD). The Chronic Kidney Disease Epidemiology Collaboration equation (CKD-EPI equation).
10. Method of palpation of the thyroid gland.

Practical skills:

1. Method and technique of palpation of the kidneys and urinary bladder.
2. Calculation of GFR using formulas
3. Method of palpation of the thyroid gland.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 354-356.

2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 348-349.

3. Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovszkaya O.V.

STUDY №16

Topic: Mini-examination: practical skills to examine patients.

Control questions:

1. History taking.

2. Assessment of the state of consciousness of the patient.
3. Inspection and palpation of the skin, subcutaneous fat.
4. Detection of edema.
5. Palpation of the lymph nodes.
6. Carrying out anthropometric measurements (height, weight, waist circumference, chest circumference, hip circumference).
7. Determination of body mass index, waist / hip index.
8. Definition of constitutional type.
9. Palpation of bones, joints and muscles.
10. Conducting body thermometry and issuing a temperature sheet.
11. Palpation of the thyroid gland.
12. Examination of the chest.
13. Palpation of the chest.
14. Comparative percussion of the lungs.
15. Topographic percussion of the lungs.
16. Auscultation of the lungs.
17. Bronchophony.
18. Inspection of the heart and blood vessels.
19. Palpation of the heart area.
20. Percussion of the heart.
21. Auscultation of the heart.
22. Radial pulse measurements.
23. Method for measuring blood pressure.
24. Examination of the oral cavity
25. Examination of the abdomen
26. Percussion of the abdomen.
27. Auscultation of the abdomen.
28. Superficial palpation of the abdomen.
29. Deep palpation of the intestine.
30. Palpation of the stomach.
31. Percussion of the liver.
32. Palpation of the liver.
33. Percussion of the spleen.
34. Palpation of the spleen.
35. Pasternatsky symptom
36. Palpation of the kidneys.
37. Palpation of the ureteral points.
38. Palpation of the urinary bladder.
39. Auscultation of the renal arteries
40. The technique of the ECG registration.
41. ECG interpretation.

Literature:

1. Propaedeutics of Internal Diseases: Text-book / T.P. Pronko, E.M. Surmach, A.V. Pyrochkin – Minsk: AIV, 2020. – P. 7-14, 15-21, 22-36, 36-43, 44-53, 53-57, 57-62, 118-127, 127-134, 142-153, 158-168, 273-283, 340-347, 354-356.

2. A guide to physical examination and history taking: Text-book/ B. Bates, et al. – 6th edition. – J.B. Lippincott Company, 1995. – P. 1-61, 95-130, 131-227, 229-240, 240-244, 244-257, 259-261, 261-266, 267-268, 286-294, 274-281, 331-340, 340-349.

3 Electronic educational methodical guide "Propaedeutics of internal diseases", specialty 1-79 01 01 "Medical care" for students of the Faculty of Foreign Students (English language), authors: Pronko T.P., Surmach K.M., Ostrovsckaya O.V.