Ministry of Health of the Republic of Belarus

Educational Institution "Vitebsk State Order of Peoples' Friendship

Medical University"

Department of Faculty Therapy and Cardiology

with a course of the Faculty of Advanced Training and retraining

Approved at the meeting of the department

Protocol No. 10 from 09.01.2025

**METHODOLOGICAL GUIDELINES FOR STUDENTS**

**for practical training**

in the academic discipline "Internal diseases"

specialties 1-79 01 01 "Medical business"

4th year, Faculty of Medicine

full-time education

Lesson topic: Esophagus diseases. Gastroesophageal reflux disease

Duration: 6 hours

Compiled by:

T.N. Dusova, Senior Lecturer

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**Motivational characteristics of the need to study the topic**

**Goals and objectives of the lesson:**

***The educational objectives*** are to develop students'

*scientific knowledge about:*

modern state of gastroenterological service of the Republic of Belarus, achievements of the Republic of Belarus in the field of gastroenterology; organization of medical care for patients with gastrointestinal diseases, prevalence of the main pathology; peculiarities of medical care in outpatient and inpatient settings; new therapeutic and diagnostic technologies in the management of patients with gastrointestinal diseases; main tasks to improve care for patients with gastrointestinal diseases at the present stage;

the importance of external and internal environmental factors in the development of esophageal diseases, gastroesophageal reflux disease;

mechanisms of pathogenesis of esophageal diseases, gastroesophageal reflux disease;

typical clinical manifestations of esophageal diseases, gastroesophageal reflux disease;

modern methods of diagnostics of esophageal diseases, gastroesophageal reflux disease;

strategy and tactics of management of patients with esophageal diseases, gastroesophageal reflux disease;

*skills and abilities necessary for:*

individual examination of patients with esophageal diseases, gastroesophageal reflux disease;

diagnosis and differential diagnosis of esophageal diseases, gastroesophageal reflux disease;

drawing up an examination plan for patients with esophageal diseases, gastroesophageal reflux disease, evaluating the results of laboratory and instrumental methods of investigation;

selection and prescription of drugs for treatment of esophageal diseases, gastroesophageal reflux disease;

prevention of esophageal diseases, gastroesophageal reflux disease.

***Developmental goals*** consist in the formation and development of mental properties of the student, including attention, sensory and perceptual properties, mnemic and thinking properties, psychomotor properties, professional skills and abilities.

***Educational objectives*** are aimed at the formation of personal qualities of students in the course of the training session: a sense of mutual assistance, teamwork, subordination, tact, empathy, responsibility for the assigned work, diligence, accuracy, conscientiousness, understanding the importance of the profession, pride in the achievements of national medicine.

**During the study of the topic of the training session the student should**

**study**:

basic concepts: gastroesophageal reflux disease, gastroesophageal reflux disease, non-erosive reflux disease, reflux esophagitis, Barrett's esophagus, high-resolution manometry, pH-impedanceometry, abdominal pain

Epidemiology, etiology, pathogenesis, predisposing factors, classifications, clinical manifestations, complications, diagnostic methods, differential diagnosis, treatment, primary and secondary prevention, dispensary and prognosis in esophageal diseases, gastroesophageal reflux disease;

**learn how to:**

interview (collection of complaints and anamnesis) and clinical examination of patients with esophageal diseases, gastroesophageal reflux disease;

make a plan of examination of patients with esophageal diseases, gastroesophageal reflux disease;

interpret the results of laboratory and instrumental investigations in patients with esophageal diseases, gastroesophageal reflux disease;

formulate preliminary and final diagnosis in esophageal diseases, gastroesophageal reflux disease;execute medical documentation (medical history, appointment sheet, referrals for laboratory and instrumental examinations and consultations, prescriptions for basic medicines);

**practice:**

skills in interpreting the results of general blood analysis, general urine analysis, serum biochemistry, coagulogram, ECG, Rn-impedanceometry, high-resolution manometry, radiographs, scans, angiograms, scintigrams, heart, abdominal and renal organs; endoscopic examination of the GI tract; formulation of the diagnosis of esophageal diseases, gastroesophageal reflux disease.

**Practical skills to be formed during the course, including with the use of simulation training technologies:**

1. Interpretation of results of general blood analysis, general urine analysis, serum biochemical study, coagulogram, ECG, Rn-impedanceometry, high-resolution manometry, X-rays, scans, angiograms, scintigrams, heart, abdominal and renal organs; endoscopic study of the GI tract.
2. Formulation of the diagnosis.

**Interdisciplinary and intradisciplinary links**

When studying the topic use the knowledge and skills obtained during the study of normal and pathological human anatomy, normal and pathological human physiology, pharmacology, propaedeutics of internal diseases.

**Theoretical part**

**Questions for classroom monitoring during the lesson:**

1. Current state of gastroenterological service of the Republic of Belarus, achievements of the Republic of Belarus in the field of gastroenterology.
2. Organization of medical care for patients with gastrointestinal tract (GIT) diseases, prevalence of the main pathology. Features of medical care in outpatient and inpatient settings.
3. New treatment and diagnostic technologies in management of patients with GIT diseases. Main tasks to improve the provision of care to patients with GIT diseases at the present stage. Medical ethics and deontology in management of patients with GIT diseases.
4. Gastroesophageal reflux disease: etiology, pathogenesis, clinical picture, modern diagnostic methods, diagnostic criteria, differential diagnostics (hernias of the esophageal opening of the diaphragm, functional disorders of the esophagus, esophagitis, erosions and ulcers of the esophagus, achalasia of the cardia, diverticula, neoplasms of the esophagus), treatment, rehabilitation, prognosis.

**Practical part**

1. *Curation of patients*: collection of complaints and medical history of patients with gastroesophageal reflux disease; objective examination; drawing up an examination plan; interpretation of the results of laboratory and instrumental methods of examination; formulation of diagnosis; drawing up a treatment plan for patients with gastroesophageal reflux disease. Registration of medical documentation.
2. *Modeling and solving situational tasks.*

**Tasks and questions to control the learning of the topic**

1. Prescribe basic drugs for the treatment gastroesophageal reflux disease (omeprazole, drotaverine, methaclopramide, almagel, famotidine).

2. Justify and formulate a diagnosis when solving a case study.

3. Test tasks on the topic of practical training.

**Questions for guided independent work**

Guided independent work is not provided for by the educational institution’s curriculum for the academic discipline “Internal Medicine” for the specialty 1-79 01 01 “General Medicine”.

**Literature**

**Main:**

1. Internal Diseases = Внутренние болезни : textbook : in 2 vol. Vol. 1 : / edited by A. I. Martynov, J. D. Kobalava, S. V. Moiseev. - Moscow : GEOTAR-Media, 2022. - 683 p. : ill. - Bibliogr.: p. 677. - ISBN 978-5-9704-6766-4. - Режим доступа: https://www.studentlibrary.ru/book/ISBN9785970467664.html – 30 экз.

2. Internal Diseases = Внутренние болезни : textbook : in 2 vol. Vol. 2 : / edited by A. I. Martynov, J. D. Kobalava, S. V. Moiseev. - Moscow : GEOTAR-Media, 2022. - 614 p. : ill. - ISBN 978-5-9704-6767-1. - Режим доступа*:* https://www.studentlibrary.ru/book/ISBN9785970467671.html – 30 экз.

3. Special propedeutics of internal diseases : lecture course / Vitebsk State Medical University, Dep. of Propedeutics of Internal Diseases ; comp. by L. M. Nemtsov. - 2-е изд. - Vitebsk : VSMU, 2016. - 318 p. - Bibliogr.: p. 318. - ISBN 978-985-466-822-2. - Режим доступа: https://elib.vsmu.by/handle/123/9837 - 317 экз.

4. Немцов, Л. М. Пропедевтика внутренних болезней = Propaedeutics of Internal Diseases : учеб. пособие на англ. яз. : для иностр. студентов учреждений высш. образования по специальности "Лечебное дело" : [в 2 ч.]. Ч. 2 : : Обследование органов систем пищеварения, мочевыделения, желез внутренней секреции, крови и опорно-двигательного аппарата / Л. М. Немцов, В. А. Прищепенко, Ю. Г. Юпатов ; М-во образования Республики Беларусь, УО "Витебский гос. мед. ун-т". - Витебск : [ВГМУ], 2023. - 423 с. : ил. - Библиогр.: с. 421-423. - ISBN 978-985-580-165-9. - Режим доступа: https://elib.vsmu.by/handle/123/25144 Гриф(приоритет документа): МО - 250 экз.

**Additional:**

5. Examination of patients in clinic of internal diseases = Обследование пациентов в клинике внутренних болезней : educational instruction for students of 2nd and 3rd years in specialties "General Medicine" and "Stomatology" / Г. И. Юпатов [и др.] ; Ministry of Public Health of Republic of Belarus, EI "Vitebsk State of the order of International Friendship Medical University", Dep. of Internal Diseases Propedeutics. - Vitebsk : VSMU, 2016. - 59 p. - Bibliogr.: p. 31. - ISBN 978-985-466-838-3. – 254 экз.

6. Family Medicine : in 3 books : textbook for students of higher medical education establishments - medical universities, institutes and academies. Book 2 : : Symptoms and Syndromes in Clinical Course of Internal Diseases / L. S. Babinets [и др.] ; edited by O. M. Hyrina, L. M. Pasiyeshvili. - Kyiv : AUS Medicine Publishing, 2018. - 375 p. : ill. - Bibliogr. at the end of the chapters. - ISBN 978-617-505-652-3. Гриф(приоритет документа): МО Укр. *-* 1 экз*.*

7. Family Medicine : in 3 books : textbook for students of higher medical education establishments of the 4th level of accreditation. Book 1 : : General Issues of Family Medicine / O. M. Hyrina [и др.] ; edited by O. M. Hyrina, L. M. Pasiyeshvili. - Kyiv : AUS Medicine Publishing, 2016. - 558 c. : ill. - Bibliogr. at the end of the chapters. - ISBN 978-617-505-494-9. Гриф (приоритет документа): МО Укр. - 1 экз.

8. Internal Medicine: Critical Care : textbook / Babak O. Ya. [и др.] ; edited by O. Ya. Babak, O. M. Bilovol. - Kyiv : AUS Medicine Publishing, 2018. - 367 p. : ill. - ISBN 978-617-505-636-3. Гриф(приоритет документа): УМО Укр. - 1 экз.

9. Kumar & Clark's Clinical Medicine / ed. by Parveen Kumar, Michael Clark ; editor, Online Content Adam Feather. - 9th ed. - Edinburgh [etc.] : Elsevier, 2017. - XIV, 1437 p. : ill. - Bibliogr. at the end of the chapters. - ISBN 978-0-7020-6601-6. - 1 экз.

10. Внутренние болезни = Internal diseases : учеб. пособие для студентов фак. иностр. учащихся и магистрантов (с англ. яз. обучения) / В. М. Пырочкин [и др.] ; М-во здравоохранения Республики Беларусь, УО "Гродненский гос. мед. ун-т" ; под общ. ред. В. М. Пырочкина. - Гродно : ГрГМУ, 2016. - 389 с. : ил. - Библиогр. в тексте. - ISBN 978-985-558-617-4. – 1 экз.

11. Дополнительные методы исследования в клинике внутренних болезней. Практикум = Diagnostic methods in the internal medicine. Workbook : учеб.-метод. пособие для студентов учреждений высш. образования, обучающихся по специальности 1-79 01 01 "Лечебное дело" / Э. А. Доценко [и др.] ; М-во здравоохранения Республики Беларусь, Белорус. гос. мед. ун-т, Каф. пропедевтики внутрен. болезней. - 4-е изд. - Минск : БГМУ, 2024. - 158 с. - Загл. обл.: Diagnostic methods in the internal medicine. Workbook. - ISBN 978-985-21-1556-8. - Режим доступа: https://rep.bsmu.by/handle/BSMU/44425 Гриф(приоритет документа): УМО – 1 экз.

**Regulatory legal acts:**

12. О здравоохранении: Закон Республики Беларусь от 18 июня 1993 г. № 2435-XII: с изменениями и дополнениями. **Литература** / ООО «Профессиональные правовые системы». – Минск, 2019.