MINISTRY OF HEALTH OF THE REPUBLIC OF BELARUS

«VITEBSK STATE ORDER OF PEOPLES’ FRIENDSHIP

MEDICAL UNIVERSITY»

DEPARTMENT OF OBSTETRICS AND GYNECOLOGY

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|  | Approved at the meeting of the department  Protocol №1 02.09.2024 |

**METHODOLOGICAL INSTRUCTIONS FOR STUDENTS**

**for clinical practical classes**

in the discipline “Obstetrics and Gynecology”

speciality 1-79 01 01 “General Medicine”

V course Faculty of overseas students training

full-time education

**Lesson Topic:** Menstrual function and its disorders (amenorrhea, dismenorrhea, abnormal uterine bleeding).

**Duration of the class:** 5 hours

**Authors:**

N.I. Kiseleva, Head of the Department of Obstetrics and Gynecology of the educational institution "Vitebsk State Order of Peoples’ Friendship Medical University", Professor

O.I. Prusakova, Associate Professor of the Department of Obstetrics and Gynecology of the educational institution "Vitebsk State Order of Peoples’ Friendship Medical University"

V.A. Sleptsova, Assistant of the Department of Obstetrics and Gynecology of the educational institution "Vitebsk State Order of Peoples’ Friendship Medical University"

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**Motivational characteristics of the necessity of studying the topic:**

Menstrual dysfunction occurs when its regulation is disrupted at various levels and can be caused by diseases, disorders of the nervous and endocrine systems, poor nutrition, infectious and somatic diseases, extragenital pathology.

Abnormal uterine bleeding is common among gynecological pathologies and can lead to reproductive dysfunction, loss of ability to work, development of neuropsychiatric complications, and disability of women.

**Goals and objectives of the class:**

**Learning goals**

To know the neurohumoral regulation of menstrual cycle.

To study the etiology, pathogenesis, classification, clinical picture, diagnosis, treatment and prevention of menstrual disorders: аmenorrhea, dysmenorrhea, dysfunctional (abnormal) uterine bleeding in juvenile, reproductive and climacteric periods.

**Developmental goals**

Formation of clinical mindset, development of attentiveness and observation while performing practical clinical tasks, development and improvement of communication skills “doctor-patient”, strengthening interest in the study of the topic of the class and nephrology in general.

**Formative goals**

Formation and development of the sense of mutual assistance, subordination, tact, empathy, responsibility for the assigned work, efficiency, accuracy, conscientiousness, understanding of the importance of the profession, familiarization with the norms of professional activity taking into account medical ethics and deontology in the management of nephrology patients.

**Lesson objectives**

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

**learn:**

* neurohumoral regulation of menstrual cycle;
* etiology, pathogenesis, classification, clinical picture, diagnosis, treatment and prevention of menstrual disorders: аmenorrhea, dysmenorrhea, dysfunctional (abnormal) uterine bleeding in juvenile, reproductive and climacteric periods.

**be able to:**

* take anamnesis from a patient with gynecological pathology;
* chart a survey and treatment plan for patient with amenorrhea;
* evaluate the results of the examination of patients with amenorrhea, diagnostics and prescribe treatment;
* make differential diagnosis between different forms of amenorrhea;
* make differential diagnosis between the uterine bleeding, associated with impaired hormonal function of the ovaries, and abortion, organic diseases of the genital organs;
* stop uterine bleeding (hormonal, symptomatic or surgical hemostasis);
* validate indications for surgical treatment of dysfunctional (abnormal) uterine bleeding (uterine curretage, hysterectomy);

**practice:**

* basic techniques for examining patients with gynecological diseases.

**Practical skills to be formed when class is conducted, including with the use of simulation training technologies:**

1. Examination of the cervix in speculum.

2. Bimanual vaginal-abdominal examination.

3. Separate diagnostic curettage of the uterus.

**Interdisciplinary and intra-disciplinary links**

For a full understanding of the topic of the class in the study, interpretation of the data obtained laboratory and instrumental methods of research, it is necessary to be guided by previous knowledge in the field of normal and pathological physiology, anatomy (including topographic), biochemistry, histology, pharmacology, propaedeutics of internal medicine, infectious diseases, clinical immunology and allergology.

**Theoretical part**

All necessary information for preparation for the lesson can be found in the distance learning system of VSMU (Faculties→ Faculty of Medicine→ Department of Obstetrics and Gynecology → Obstetrics and Gynecology (5th year Overseas Students Training Faculty). The presentation of theoretical material should be deep, consistent in accordance with the list of control questions on the topic of the class. References to the used sources should be indicated in the process of their mentioning according to the list of used literature. When presenting issues related to diagnosis and treatment, it is recommended to emphasize modern methods and recommendations (according to clinical protocols of the Ministry of Health of the Republic of Belarus, national and international clinical guidelines).

**Classroom control questions:**

1. Menstrual function.

2. Neurohumoral regulation of the reproductive system.

3. Characteristics of the normal menstrual cycle.

4. Classification of menstrual cycle disorders.

5. Definition of the concept of abnormal uterine bleeding.

4. Causes and pathogenesis of AUB.

5. Classification of AUB.

6. Clinical picture, diagnostics and differential diagnostics of juvenile bleeding.

7. Clinical picture, diagnostics of bleeding in reproductive age.

8. Clinical picture, diagnostics and differential diagnostics of bleeding in menopause.

9. Treatment of AUB at different age periods.

10. Types of hemostasis, indications and contraindications.

11. Providing emergency medical care for abnormal uterine bleeding.

12. Neurohumoral regulation of the reproductive system.

13. Amenorrhea: definition, classification.

14. Primary amenorrhea without delayed sexual development (hymenal atresia, Mayer-Rokitansky-Küstner syndrome): clinical features, diagnostics, treatment.

15. Primary amenorrhea with delayed sexual development (gonadal dysgenesis, testicular feminization syndrome, pituitary hypogonadotropichypogonadism, hypothalamic hypogonadotropichypogonadism, hypothalamic hypopituitarism): clinical features, diagnostics, treatment.

16. Secondary hypothalamic amenorrhea (anorexia nervosa, psychogenic amenorrhea, amenorrhea with weight loss, hyperprolactinemia): clinical features, diagnostics, treatment.

17. Secondary pituitary amenorrhea (Sheehan's syndrome, Simmonds' disease, amenorrhea in Itsenko-Cushing's disease, acromegaly and gigantism, prolactin-secreting pituitary adenoma): clinical features, diagnostics, treatment.

18. Secondary ovarian amenorrhea (resistant ovary syndrome): clinical features, diagnostics, treatment.

19. Secondary uterine amenorrhea: clinical features, diagnostics, treatment.

20. Etiology, pathogenesis, clinical features, diagnostics and treatment of dysmenorrhea.

**Practical part**

Solving clinical tasks – see the topic "Menstrual function and its disorders" in the manual Obstetrics and gynecology: clinical tasks: a manual for students of higher education institutions studying in the specialty 1-79 01 01 "General Medicine" / L.E. Radeckaya [et al.]; Ministry of Health of the Republic of Belarus, UO "Vitebsk State Order of Peoples’ Friendship Medical University", Department of Obstetrics and Gynecology. - Vitebsk: [VSMU], 2021. - 67 p. - <https://do2.vsmu.by/pluginfile.php/323312/mod_resource/content/0/Radeckaya-LE_Obstetrics_and_gynecology_clinical_tasks_2021.pdf>

Algorithms for completing practical skills can be found at <https://do2.vsmu.by/course/view.php?id=2062> (practical section, manual on practical skills in obstetrics and gynecology - video)

**LITERATURE:**

**Basic:**

1. Dutta D.C. Textbook of gynecology including contraception / textbook / Calcutta: New central book Agency (P) Ltd. - 2016. -574 P.

2. Гинекология : пособие / Н.И. Киселева [и др.]; под общ. ред. Н.И. Киселевой. – Витебск : ВГМУ, 2022. – 478 с.

**Additional:**

1. Сборник тестовых заданий по гинекологии для специальности 1-79 01 01 "Лечебное дело" = Multiple choice questionnaire on gynecology for the specialty 1-79 01 01 "General practice" / Л. Е. Радецкая [и др.]. - Витебск : ВГМУ, 2020. - 63 с. - Режим доступа: https://elib.vsmu.by/handle/123/22320 2. Obstetrics and gynecology: practical skills = Акушерство и гинекология: практические навыки : метод. рекомендации / Л. Е. Радецкая [и др.] ; М-во здравоохранения Республики Беларусь, УО "Витебский гос. ордена Дружбы народов мед. ун-т", Каф. акушерства и гинекологии. - (2-е изд., перераб. и доп.). - Витебск : ВГМУ, 2020. - 68 с. : ил. - Библиогр.: с. 67-68. - ISBN 978-985-580-009-6. - Режим доступа: https://elib.vsmu.by/handle/123/22909

3. Radeckaya, L. E. Obstetrics and gynecology: clinical tasks = Акушерство и гинекология: клинические задачи : метод. рекомендации / L. E. Radeckaya, E. A. Kolbasova ; М-во здравоохранения Республики Беларусь, УО "Витебский гос. ордена Дружбы народов мед. ун-т", Каф. акушерства и гинекологии. - Витебск : [ВГМУ], 2021. - 66 с. - Режим доступа: https://elib.vsmu.by/handle/123/23638 4. Radzinskiy, V. Е. (Радзинский В. Е. ) Gynecology : textbook / ed. by Radzinskiy V. Е. , Fuks А. М. - Москва : ГЭОТАР-Медиа, 2020. - 896 с. Режим доступа: https://www.studentlibrary.ru/book/ISBN9785970457993.html