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:** Neuroendocrine syndromes in gynecology.

**Duration of the class:** 5 hours

**Authors:**

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

Neuroendocrine gynecological syndromes have a common pathogenesis – disorders of the hypothalamic-pituitary system as the most important link in the regulation of specific functions of the female body. The peculiarity of neuroendocrine syndromes is their clinical polymorphism and close connection with vegetative, emotional and motivational disorders. The multiplicity of hypothalamic functions, their dependence on neurotransmitter control, close two-way connection with other structures of the limbic-reticular complex, its inclusion in the cerebral systems of neuroendocrine, psychovegetative regulation largely determine the clinical polymorphism of neuroendocrine-endocrine syndromes.

**Goals and objectives of the class:**

**Learning goals**

To know the etiology, pathogenesis, classification, clinical manifestations of neuroendocrine syndromes

To study the diagnostic methods and modern principles of neuroendocrine syndromes therapy: premenstrual, post-castration, climacteric, adrenogenital syndromes; hirsutism and virilization; the syndrome and disease of polycystic ovaries.

**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:**

* classification of the neuroendocrine syndromes;
* etiology, pathogenesis of the neuroendocrine syndromes (premenstrual, post-castration, climacteric, adrenogenital, hirsutism and virilization, polycystic ovary syndrome and disease);
* clinic of the neuroendocrine syndromes (premenstrual, post-castration, climacteric, adrenogenital, hirsutism and virilization, polycystic ovary syndrome and disease);
* methods of diagnosis, differential diagnosis, treatment of the neuroendocrine syndromes (premenstrual, post-castration, climacteric, adrenogenital, hirsutism and virilization, polycystic ovary syndrome and disease);
* indications and contraindications to the appointment of hormone replacement therapy, modern hormonal drugs used for substitution therapy;
* rehabilitation of patients with menstrual disorders and neuroendocrine syndromes.

**be able to:**

* chart a survey and treatment plan for patient with neuroendocrine syndrome;
* make a differential diagnosis between different neuroendocrine syndromes.

**practice:**

* basic techniques for examining patients with neuroendocrine syndromes.

**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.

**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. Definition of the concept of neuroendocrine syndrome.

2. Causes and pathogenesis of neuroendocrine syndromes.

3. Classification of neuroendocrine syndromes.

4. Clinical picture, diagnostics and differential diagnostics, treatment of premenstrual syndrome.

5. Clinical picture, diagnostics and differential diagnostics, treatment of climacteric syndrome.

6. Clinical picture, diagnostics and differential diagnostics, treatment of polycystic ovary syndrome.

7. Clinical picture, diagnostics and differential diagnostics, treatment of a patient with congenital dysfunction of the adrenal cortex.

8. Clinical picture, diagnostics and differential diagnostics, treatment of a patient with postovariectomy syndrome.

9. Observation of patients with neuroendocrine syndromes in a antenatal clinic.

10. Hormonal treatment of neuroendocrine syndromes.

**Practical part**

Solving clinical tasks – see the topic "Neuroendocrine gynecological syndromes" 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)

**Questions for student independent work**

Lecture "Neuroendocrine syndromes" (USR - 0.67 hours), see the link <https://do2.vsmu.by/mod/resource/view.php?id=221915>

Test "Climacteric syndrome" (USR - 0.67 hours), see the link <https://do2.vsmu.by/mod/quiz/view.php?id=302520>

**Deadline for completion of student independent work:**

During the semester.

**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