**Methodical development of practical exercises**

**for teachers on a cycle**

**«HOSPITAL SURGERY»**

**Practical lesson № 10**

1. **Theme of the lesson: «Thrombosis and embolism of the main arteries».**
2. **Purpose:** to consolidate and expand the spectrum of students' knowledge and skills on the problem of surgical pathology of the Thrombosis and embolism of the main arteries, the formation and assimilation of the foundations of professional competence in relation to the section of surgical diseases under study.
3. **Tasks:**

**The training task:** to consolidate knowledge on the surgical anatomy of the Thrombosis and embolism of the main arteries, to analyze the data obtained earlier on the normal physiology of the Thrombosis and embolism of the main arteries and the disturbance of its functions in the development of pathology, to study the classification, etiology, clinic of the disease. Learn to identify the symptoms of these diseases, learn to evaluate the laboratory, radiological and endoscopic survey data, study the tactics in these diseases, methods of conservative treatment, indications for surgery, principles of surgical treatment for these diseases.

**Developmental task**: to develop skills in working with medical literature, to communicate with patients, their relatives, medical workers, to develop skills in general clinical and surgical examination of patients, perform routine surgical manipulations, to promote the formation of clinical thinking skills, the ability to make decisions, assessing the degree of risk in difficult situations.

**Educating task**: to cultivate respect for patients, their relatives, colleagues, a sense of responsibility for all medical and other actions.

1. **Questions for self-preparation:**

1. Anatomy of the aorta, iliac, femoral, subclavian, brachial arteries.

2. Etiology, pathogenesis of acute arterial thrombosis.

3. Reperfusion syndrome in restoring blood flow to the extremities.

4. Clinic of acute arterial obstruction, depending on the level of occlusion.

5. Instrumental diagnostics of occlusal lesions of arterial vessels (ultrasound, dopplerography, angiography).

6. Differential diagnosis of embolism, arterial thrombosis and deep vein thrombophlebitis of lower extremities.

7. Surgical treatment for embolism, thrombosis.

8. Reconstructive surgery for atherosclerotic lesions of the aorta, iliac, femoral, tibial arteries.

1. **Basic concepts of the topic:**

1. thromboendocarditis of the left side of the heart

2. Vegetations on valves

3. atherosclerosis of the aorta

4. aortic aneurysm

5. thrombosis of pulmonary veins

6. change in blood composition

7. hypertensive disease

8. violation of blood flow

9. ischemia of stress

10. Sharp pain

11. pallor of the skin

12. decrease in skin temperature

13. Decreased sensitivity

14. absence of pulsation of arteries

15. angiography

16. embolectomy

17. Thrombenderterectomy

18. amputation of limb

19. X-ray endovascular dilatation of arteries

20. disaggregants

21. antispasmodics

22. anticoagulants

23. fibrinolysis activators

24. Gangrene of the limb

1. **Chronocard lessons.**

|  |  |  |  |
| --- | --- | --- | --- |
| №  п/п | Stages and contents of the lesson | Мethods and forms | Time |
| 1  1.1  1.2  1.3 | Introductory part of the lesson  Announcement of the topic, objective of the lession.  Evaluation of the readiness of the audience, equipment and students.  Characteristics of the stages and content of the work of students in lesson | Сonversation | 5 minutes |
| 2 | Detection of basic (theoretical) knowledge of students (answers to questions, test tasks, interview). | Interview, survey, testing | 35  minutes |
| 3 | Independent work of students under the supervision of the teacher (evaluation of the results of the examination of patients, the decision of situational problems, the analysis of clinical cases, the construction of diagnostic and therapeutic algorithms). | Work in small groups | 60  minutes |
| 4 | Quality control of students 'knowledge on the topic of the lession (interview, solving of situational tasks, listening to abstracts, discussion of results of students' out-of-class work). | Interview, survey, testing | 70  minutes |
| 5  5.1  5.2  5.3 | The final part of the lesson:  Conclusions on the topic.  Evaluation of the work of students in lession.  Homework for the next lesson | Conversation, individual rating | 10  minutes |

1. **Location:** classroom
2. **Didactic and technical equipment of the lesson**

- Didactic: tables, educational and clinical records of the disease, X-ray picture

- Material and technical: chalk, blackboard.

9. **Literature**

|  |  |
| --- | --- |
| Main literature | Rajgopal, Shenoy KManual of Surgery [Текст] = Руководство по хирургии : руководство / Shenoy K Rajgopal. - 7-е изд. - New Delhi : GBS Publishers & Distributiors (Pvt.) Ltd., 2009. - 827 с. : ил. - ISBN 81-239-1237-4 : 1200.00 р., 660.00 р.  Перевод заглавия: Руководство по хирургии |
| Additional literature | 1. Surgical diseases "/ MI Kuzin, 2015. - 992  2. Surgical diseases: textbook / ed. A.F. Chernousov. - Moscow: GOETAR-Media, 2010. - 664 .: ill. + CD. |