

Thematic plan of practical classroom training sessions for students of the 4th year of the Faculty of Foreign students studying in English for the 7th semester

Lesson # 1.

Topic 1.1. Fundamentals of Anesthesiology and Reanimatology (AR)

1. Concept, terminology, goals, objectives.
2. The history of AR development.

Topic 1.2. Organization of the anesthesiology and intensive care services

3. Regulations governing the work of the AR service.
4. Organization and principles of work of ICU departments.
5. Indications for hospitalization and transfer of patients to the ICU.

Topic 1.3. Monitoring of the main parameters of patient's life support in anesthesiology and intensive care

6. Methods of objective monitoring of patients' condition.

Lesson # 2.

Topic 1.3. Monitoring of the main parameters of patient's life support in anesthesiology and intensive care

1. The concept of functional, hemodynamic and respiratory monitoring.
2. Necessary monitoring during scheduled and emergency operations.
3. Monitoring the effectiveness of anesthesia.

Topic 1.4. General anesthesia (GA)

4. Types, clinic, stages of OA. Theories of general anesthesia (GA).
5. OA components: general and special.
6. Inhalation GA.
7. Clinical and pharmacological characteristics of inhaled anesthetics.
8. The concept of minimum alveolar concentration.

Lesson # 3.

Topic 1.4. General anesthesia

1. Equipment, anesthesia machine circuit, breathing circuits.
2. Masked and endotracheal GA, complications.
3. Non-inhalation GA, types and methods.
4. Clinical and pharmacological characteristics of non-inhalation anesthetics, possible combinations, indications, contraindications, complications.
5. Muscle relaxants.
6. Combined GA. Kinds.
7. Features of the period of administration, maintenance and recovery from GA.
8. Medical sedation.

Lesson # 4.

Topic 1.5. Local anesthesia (LA)

1. Types of LA.
2. Local anesthetics, mechanism of action, pharmacodynamics. Contraindications.
3. Complications of LA.

4. Surface, infiltration, conduction, intraosseous and intravenous "under the tourniquet" MA. Indications, complications, prevention and treatment.
5. Epidural, sacral, spinal anesthesia. Indications, contraindications, complications, prevention.

Topic 2.1. Preparation of the patient for anesthesia

1. Assessment of the patient's condition before surgery, selection of anesthesia.
2. The standard of preoperative examination of the patient. Preparing the patient for surgery and anesthesia.
3. Premedication and its tasks. Medicines for premedication.

Lesson # 5.

Topic 1.6. Cardiopulmonary resuscitation (basic and advanced)

1. Terminal conditions: types, clinical pathophysiology, symptoms.
2. Types of cardiac arrest, signs, diagnosis.
3. Basic cardiopulmonary resuscitation. Ways to restore and maintain patency of the upper respiratory tract. P. Safar's triple technique.
4. Heart massage, types, complications.

6. Practicing practical skills of "Basic cardiopulmonary resuscitation"

Lesson # 6.

Topic 1.6. Cardiopulmonary resuscitation (basic and advanced)

1. Extended cardiopulmonary resuscitation.
2. Drug therapy: indications, doses, routes of administration.
3. Performance indicators of intensive care.
4. Electric pulse therapy.
5. Clinical signs of biological death. Indications for termination of resuscitation measures.
6. Practicing practical skills of "Extended cardiopulmonary resuscitation"

Lesson #7

Topic 1.7. Post-cardiac arrest disease

1. Post-cardiac arrest disease: concept, clinical pathophysiology, intensive care, complications.
2. The concept of "brain death", legal aspects, the algorithm of the statement.

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