

ANNOTATION
work program of the discipline

"Anesthesiology, resuscitation, intensive care"

Speciality	05/31/01 General medicine
Number of credits	In accordance with the RUP
Interim certification form (test/exam)	test

1. The purpose of studying the discipline

The goal of mastering the discipline “Anesthesiology, resuscitation, intensive care” is to acquire knowledge in the field of diagnosis and provision of medical care to adults and adolescents in emergency conditions.

2. Summary of the discipline

1. Section "Anesthesiology"

Definition of anesthesiology as a discipline about methods of pain relief and protection of the body from surgical aggression, management or temporary replacement of the patient’s vital functions during surgery and in the immediate postoperative period. Classification of pain relief methods. General anesthesia. Theory of anesthesia, clinical picture and stages of anesthesia. Equipment for anesthesia. Components of general anesthesia. Inhalation anesthesia. Combined (multicomponent) endotracheal anesthesia with muscle relaxants. Non-inhalational anesthesia. Total intravenous anesthesia. Combined methods of general anesthesia. Local anesthesia. Epidural and spinal anesthesia. Monitoring the patient's condition during anesthesia and surgery. Complications of the immediate post-anesthesia period, their prevention and treatment.

2. Section "Resuscitation"

Classification of terminal conditions. Clinical death. Types of cardiac arrest, clinical signs, diagnosis. Methods of cardiopulmonary resuscitation at the prehospital stage. Heart massage (indirect). Electropulse therapy. Drug therapy: pharmacodynamics of substances used to restore cardiac activity, indications for their use, doses, order and routes of administration. Dependence of therapeutic measures on the type of cardiac arrest. The sequence of resuscitation measures and intensive care methods when removing a patient from a state of clinical death. Methods for monitoring the condition of vital organs and body systems during resuscitation. Monitoring. Indications for stopping resuscitation measures. The concept of illness of a revived organism (post-resuscitation illness). Patient management in the early post-resuscitation period.

3. Section "Intensive care"

First aid for emergency conditions at the prehospital stage (electrical trauma, drowning, poisoning, car accidents, cooling, heat stroke).

Methods of resuscitation and intensive care for acute respiratory failure. Indications and methods of oxygen therapy, heliotherapy, percutaneous catheterization of the trachea and bronchi, therapeutic bronchoscopy. Methodology for assisted and artificial ventilation of the lungs, indications for its implementation. Long-term artificial ventilation.

Disturbances of water-electrolyte balance and acid-base balance. Basic principles of infusion therapy. Indications. Technique. Catheterization of the main veins. Features of infusion-transfusion therapy and parenteral nutrition in the postoperative period in patients undergoing surgery on the abdominal organs.

Hemorrhagic shock. Pathophysiology, diagnosis, resuscitation and intensive care. Traumatic shock - resuscitation and intensive care. Anaphylactic shock. Etiology, pathophysiology, resuscitation and intensive care. Methods of resuscitation and intensive care for acute cardiovascular failure (pulmonary edema, cardiogenic shock).

Intensive therapy for comatose states: hyper- and hypoglycemic coma, hyperosmolar coma, hepatic coma, cerebral edema, acute cerebrovascular accident, convulsive syndrome.

Intensive therapy of acute poisoning. Types of poisoning. Pathogenesis, clinical picture, diagnosis and emergency care for poisoning with sleeping pills, sedatives, neurotropic, hepatotropic poisons, FOS.

Intensive care and resuscitation for sepsis, principles of rational antibiotic therapy. Acute renal failure.

Acute liver failure. Pathophysiology,

clinical course, intensive care. Indications for peritoneal dialysis, hemodialysis and hemofiltration, lymphosorption, hemosorption and plasmapheresis.