

TOPICS
FOR THE PROMOTION EXAM ON ASSISTANT PROFESSOR
POSITION 13
SURGERY DISCIPLINES DEPARTMENT
FACULTY OF MEDICINE AND PHARMACY
ANESTHESIA AND INTENSIVE CARE

1. Pathophysiology of acute and chronic pain.
2. Analgesia techniques used in the therapy of acute and chronic pain.
3. Central analgesics (morphine).
4. Nonsteroidal analgesics / anti-inflammatory drugs.
5. Sleep and anesthesia.
6. Sedative and amnestic and hypnotic substances.
7. Mechanism of action of inhaled anesthetics.
8. Absorption and distribution of inhaled anesthetics.
9. Respiratory and circulatory effects of inhaled anesthetics.
10. Metabolism and toxicity of inhaled anesthetics.
11. Pharmacology of nitrous oxide.
12. Halogenated volatile anesthetics (halothane, enflurane, isoflurane, sevoflurane, desflurane).
13. Gas and vapor physics applied to inhalation anesthesia.
14. Physiology of the neuromuscular plaque.
15. Substances with relaxing action used in anesthesia (depolarizing and non-depolarizing cleansing).
16. Curare antagonists.
17. Monitoring of neuromuscular function.
18. Drugs and diseases that interfere with the action of muscle relaxants.
19. Vegetative nervous system (anatomy, physiology). Pharmacology of drugs with vegetative action (cholinergic, parasympatholytic, catecholamines, α -stimulants, α -blockers, α 2-antagonists, β -stimulants, β -blockers).
20. Routine pre-anesthesia consultation (clinical, paraclinical, forensic implications).
21. Anesthetic implications of concomitant diseases (cardiovascular, pulmonary, renal, gastrointestinal, hepatic, CNS, endocrine, hematological).
22. Anesthetic implications of chronic drug therapy.
23. Assessment of operative and anesthetic risk.
24. Premedication (stop, substances, routes of administration).
25. Maintaining airway freedom, laryngeal mask, intubation, trachea, tracheostomy ,. Humidification and mucolysis systems.

26. Surveillance and monitoring of the patient during anesthesia.
27. Intravenous anesthesia techniques (induction, maintenance, awakening, combinations of anesthetic substances, and methods of administration).
28. Inhalation anesthesia techniques.
29. Anesthesia machine (gas machine, anesthetic systems, vaporizers).
30. Intra-anesthetic mechanical ventilation.
31. Ensuring the patient's homeostasis during anesthesia.
32. Incidents and accidents of general anesthesia.
33. Immediate postanesthetic period. Awakening Salon.
34. Pharmacology of local anesthetics.
35. Morphine analgesics used in regional anesthesia.
36. Regional anesthesia techniques (local anesthesia, intravenous regional anesthesia, peripheral nerve blockages).
37. Brachial plexus blockage.
38. Central regional blockages (subarachnoid and epidural).
39. Local, focal, regional and systemic complications of regional anesthesia techniques.
40. Regional anesthesia in children (indications, techniques, incidents and specific accidents).
41. Outpatient anesthesia.
42. Anesthesia in pediatric surgery.
43. Anesthesia in emergency surgery (full stomach shock, hemorrhage, etc.).
44. Analgesia and anesthesia in obstetrics. Newborn resuscitation. Intensive care of obstetric pathology.
45. Anesthesia in neurosurgery.
46. Anesthesia in patients with heart disease (coronary, valvular, rhythm and conduction disorders, heart failure, etc.).
47. Anesthesia in the patient with lung suffering.
48. Anesthesia in patients with renal, endocrine, hepatic, hematological disorders.
49. Blood groups (methods of determination, compatibility principles).
50. Blood transfusion and fractions.
51. Autotransfusion (indications, techniques).
52. Neuroendocrine, metabolic and inflammatory response to aggression.
53. Immunological changes in the critically ill patient. Immunomanipulative modalities.
54. General pathophysiology of shock.
55. Hypovolemic shock (causes, mechanisms, treatment).
56. Traumatic shock (pathophysiology, treating).
57. Cardiogenic shock (causes, mechanisms, treatment).
58. Other forms of shock (anaphylactic, anaphylactoid, neurogenic, endocrine).

59. Infection, sepsis, septic shock (causes mechanisms).
60. Septic shock treatment.
61. Blood volume replacement solutions.
62. Drugs with cardiotonic and vasoactive action used in shock.
63. Multiple organic dysfunction syndrome (causes, mediators, effects on organ systems).
64. Treatment of multiple organ dysfunction syndrome.
65. Infection control in intensive care.
66. The risk of infection in medical personnel in the A.T.I.
67. Antibiotic therapy.
68. Parental and enteral nutrition.
69. General organization of emergency medicine systems.
70. Techniques used in emergency medicine (means of medical transport of a critically ill patient, primary evaluation of a critically ill patient outside the hospital, analgesia and sedation of critically ill patients during a medical transport, techniques for approaching the airways and artificial ventilation).
71. Primary evaluation and resuscitation of a polytrauma (outside the hospital)

BIBLIOGRAPHY

ANESTHESIA AND INTENSIVE CARE

1. P.G. Barash, B.F. Cullen, R.K. Stoeling - Handbook of Clinical Anesthesia, Lippincott Williams & Wilkins, 2000.
2. G. Edward, E. Morgan, M.S. Mikhail, M.J. Murray - Clinical Anesthesiology, Appleton & Lange, 2001.
3. W.E. Hurford, M.T. Ballin, J.K. Davidson, K. Haspel, C.E. Rosow - Clinical Anesthesia Procedures of the Massachusetts General Hospital.
4. E. Proca, G. Litarczec -Terapia pre- și postoperatorie a bolnavului chirurgical, Tratatul de patologie chirurgicală, Ed. Med., Buc., 1999.
5. R.S. Irwin, J.M. Rippe - Irwin and Rippe's Intensive Care Medicine, Lippincott Williams & Wilkins. 2002.

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