**EXAM QUESTIONS**

**YEAR II, SEMESTER IV**

Subject: **SEDATION AND ANESTHESIA IN DENTISTRY**

Type of Subject: **Compulsory**

Subject Code: **S.04.O.037**

1. Oral and Maxillofacial Surgery as a Medical Science. Object and tasks. Definition of the specialty, interrelations with other dental specializations. Anatomic territory of OMF surgery (limits, planes, anatomical structures).
2. Floors and superficial and deep and regions of the face.
3. Bones forming the facial skeleton.
4. Muscles and fasciae of the head and neck.
5. Topographic anatomy of the upper and lower jawbone.
6. Vascularization and innervation of the upper and lower jawbone.
7. Anatomical and morphological features of the maxillary sinus. Functions.
8. Anatomic elements of the temporomandibular joint.
9. Anatomy of the teeth and their relationship with adjacent anatomical formations and bony structures.
10. Deontological and medical ethics conditions in the examination of patients.
11. Stages of the clinical examination of patients with OMF diseases.
12. Subjective examination. Anamnesis. Methods. Advantages and disadvantages of each method.
13. Pain. Definition. Types, character. Main elements characterizing pain. Main elements characterizing defects and deformities.
14. Exo- and endo-oral objective clinical examination. Methods and stages. Instruments.
15. General clinical examination of the patient. Main purpose, correlation between general condition and oral and maxillofacial lesions.
16. Laboratory paraclinical explorations. Indications and clinical significance.
17. Additional paraclinical explorations used in OMFS. Radiological methods (intraoral radiographic examination, extraoral radiographic examination, computed tomography).
18. Additional paraclinical explorations used in OMF surgery. Radiological methods using contrast substance. Characteristics. Indications and clinical role: sialography, angiography, scintigraphy, fistulogram, arthrography, lymphography.
19. Additional paraclinical explorations used in OMFS. Cytological and histological methods (exfoliative cytology, salivary cytology, cytological puncture, biopsy).
20. Additional paraclinical explorations used in OMFS. Physical methods (ultrasound, thermography).
21. Additional paraclinical explorations used in OMFS. Allergy testing.
22. Morbidity and characteristics of geriatric patients.
23. Pathological conditions during pregnancy. Precautions. Therapeutic conduct.
24. Cardiovascular pathological conditions: hypertension, cardiac rheumatism, coronary artery disease. Myocardial infarction, chronic heart failure, valve lesions, cardiac conduction disorders (tachycardia). Hemorrhagic terrain. Clinical symptoms and signs, precautions. Therapeutic conduct.
25. Pulmonary patient (bronchitis, emphysema, bronchial asthma). Clinical symptoms and signs, precautions. Therapeutic conduct.
26. Hepatic patient. Clinical symptoms and signs, precautions. Therapeutic conduct.
27. Diabetic patient. Clinical symptoms and signs, precautions. Therapeutic conduct.
28. Allergic patient. Clinical symptoms and signs, precautions. Therapeutic conduct.
29. Neuro-psychic patient. Clinical symptoms and signs, precautions. Therapeutic conduct.
30. Neoplastic patient. Clinical symptoms and signs, precautions. Therapeutic conduct.
31. Preoperative evaluation of patients (complete blood count, blood chemistry, coagulation tests, urine analysis, liver tests, chest X-ray, ECG). Importance of tests.
32. Preparation of the doctor and patient for local-regional anesthesia. Preparation of instruments and operating field for local-regional anesthesia.
33. Notion and goals of anesthesia used in stomatology and OMF surgery.
34. Indications for general anesthesia in dental treatments and OMF surgery.
35. Methods of general anesthesia. Clinic and stages of general anesthesia.
36. Advantages and disadvantages of general anesthesia, peculiarities of general anesthesia related to the OMF territory.
37. Administration routes of general anesthesia (inhalation anesthesia, intravenous general anesthesia).
38. Methods of long and short-term general anesthesia.
39. Definition. Classification of local-regional anesthesia methods.
40. Advantages and disadvantages of local-regional anesthesia.
41. Indications and contraindications of local-regional anesthesia.
42. Anesthetic solutions used in dentistry, generalities (qualities of anesthetic solutions, composition, requirements for anesthetic solutions).
43. Local anesthetic substances. Groups of anesthetics. Main representatives and their basic characteristics.
44. Adjuvant and diluent substances in the composition of anesthetics and their role. Vasoconstrictor substances (natural and synthetic sympathomimetics), their role in the anesthetic solution.
45. Patient and doctor preparation for anesthesia. Instrument and operating field preparation for anesthesia.
46. Maxillary nerve, origin, trajectory, efferent branches, innervation territory.
47. Pterygoid nerve and sphenopalatine branch with its efferents: superior nasal, nasopalatine, anterior palatine, small palatines and accessories.
48. Superior and posterior alveolar nerves, superior and middle, superior and anterior. Origin, pathway, innervated territory.
49. Mandibular nerve. Pathway, innervated territory, efferent branches. Buccal, lingual, and auriculotemporal nerves.
50. Inferior alveolar nerve. Pathway, innervated territory, branches (mylohyoid and anterior belly of digastric nerve, incisive and mental nerves).
51. Non-injectable local anesthesia by refrigeration. Indications, technique, substances used.
52. Non-injectable local topical anesthesia (emulsion, ointment, spray). Indications, technique, substances used.
53. Local injection anesthesia (submucosal, paraperiosteal/plexal, subperiosteal, intraligamentary, intrapulpal, intraosseous, intraseptal, intrapapillary). Indications, technique, substances used.
54. Local regional (nerve block) anesthesia. Purposes, indications, peculiarities.
55. Posterior superior alveolar nerve block (tuberosity block) – indications, contraindications, advantages, disadvantages, alternatives.
56. Posterior superior alveolar nerve block - intraoral approach. Landmarks, technique, anesthetized territory.
57. Posterior superior alveolar nerve block - extraoral approach. Landmarks, technique.
58. Posterior superior alveolar nerve block, incidents, accidents, and local complications.
59. Infraorbital nerve block – indications, contraindications, advantages, disadvantages, alternatives.
60. Infraorbital nerve block - intraoral approach. Landmarks, technique, anesthetized territory
61. Infraorbital nerve block - extraoral approach. Landmarks, technique.
62. Infraorbital nerve block, incidents, accidents, and local complications.
63. Nasopalatine nerve nerve block (incisive nerve block) – indications, contraindications, advantages, disadvantages, alternatives.
64. Nasopalatine nerve block – oral approach. Landmarks, technique, anesthetized territory.
65. Nasopalatine nerve block – external approach (nasal). Landmarks, technique.
66. Nasopalatine nerve block. Incidents, accidents, and local complications.
67. Greater palatine nerve block (at the posterior palatal foramen) – indications, contraindications, advantages, disadvantages, alternatives.
68. Greater palatine nerve block. Landmarks, technique, anesthetized territory.
69. Greater palatine nerve block. Incidents, accidents and local complications.
70. Inferior alveolar nerve block (Spina Spix anesthesia) – indications, contraindications, advantages, disadvantages, alternatives.
71. Inferior alveolar nerve block – intraoral technique. Landmarks, technique, anesthetized territory.
72. Inferior alveolar nerve block – extraoral technique. Landmarks, technique.
73. Inferior alveolar nerve block. Incidents, accidents, and local complications.
74. Mental nerve block (at the mental foramen). Indications, contraindications, advantages, disadvantages, alternatives.
75. Mental nerve block – intraoral technique. Landmarks, technique, anesthetized territory.
76. Mental nerve block – extraoral technique. Landmarks, technique.
77. Mental nerve block. Incidents, accidents, and local complications.
78. Lingual nerve block – indications, contraindications, advantages, disadvantages, alternatives.
79. Lingual nerve block. Landmarks, technique, anesthetized territory.
80. Lingual nerve block. Incidents, accidents, and local complications.
81. Buccal nerve block – indications, contraindications, advantages, disadvantages, alternatives.
82. Buccal nerve block. Landmarks, technique, anesthetized territory.
83. Buccal nerve block. Incidents, accidents, and local complications.
84. Simultaneously mandibular nerve branches block.
85. Classification and purpose of sedation application according to the American Society of Anesthesiologists (ASA).
86. Indications and contraindications of sedation in dentistry.
87. Types and methods of sedation (intravenous, oral, and inhalation).
88. Inhalation sedation. Methods. Indications and contraindications of inhalation sedation. Advantages and disadvantages.
89. Considerations on different inhalation sedation systems. Work protocols for inhalation sedation.
90. Signs of the onset of inhalation sedation.
91. General toxic accidents caused by the anesthetic substance.
92. Fainting. Clinic. First aid.
93. Cardio-respiratory syncope. Clinic. First aid.
94. Cardiorespiratory arrest. Clinic. Basic life support measures (A. Airway; B. Breathing; C. Circulations).
95. Seizures. First aid.
96. Allergic accidents. (Urticaria, Quincke's edema, anaphylactic shock).
97. Complications determined by the "terrain" factor (geriatric patient, pregnant woman, cardiac patient, diabetic patient, coagulopathic patient).
98. Immediate accidents: pain, vascular lesions, transient paralysis.
99. Immediate accidents: ocular disorders, needle falling into the upper respiratory tract, needle breakage, failure to establish anesthesia.
100. Complications (secondary accidents): mucosal necrosis, post-anesthetic edema, dry socket, perimaxillary infections, post-anesthetic neuritis.