

**Assessment tools for conducting attestation
in discipline «Oral Surgery»
for students of 2023, 2022 year of admission
under the educational programme
cipher 31.05.03 Dentistry,
specialisation (profile) Dentistry
(Specialist's),
form of study full-time
for the 2025-2026 academic year**

1. Assessment tools for ongoing discipline certification

The current certification includes the following types of tasks: testing, solving situational problems, test work, preparation of a report, interview on control questions, evaluation of the development of practical skills.

1.1. Examples of test tasks

Verified indicators of competence achievement: ОПК-7.1.1; ОПК-7.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1; ПК-7.1.1; ПК-7.2.1

1.MECHANISM OF THE ANALGESIC EFFECT OF LOCAL ANESTHETICS

- 1) effects on the cerebral cortex
- 2) effects on the spinal cord
- 3) influence on thalamus
- 4) blockade of sensitive nerve endings and conductors (+)
- 5) by coagulation of the surface layer of mucous membranes and skin

1.MECHANISM OF THE ANALGESIC EFFECT OF LOCAL ANESTHETICS

- 1) effects on the cerebral cortex
- 2) effects on the spinal cord
- 3) influence on thalamus
- 4) blockade of sensitive nerve endings and conductors (+)
- 5) by coagulation of the surface layer of mucous membranes and skin

2. WHY TISSUE OSSIFICATION INTENSIFIES AND PROLONGS THE EFFECT OF ANESTHETICS

- 1) is only expressive

- 2) the narrowing of the vessels slows down the absorption of the anesthetic into the blood (+)
- 3) increased absorption of anesthetic into the blood
- 4) reduces the release of mediators from presynaptic vesicles

3. VASOCONSTRICTORS CALL

- 1) analgesia
- 2) hyperemia of the skin
- 3) Expansion of vessels
- 4) vessel narrowing (+)

4. THE DOMINANT MANIFESTATION OF SYSTEMIC ANAPHYLAXIS (ANAPHYLACTIC SHOCK)

- 1) suffocation attack
- 2) cardiogenic shock
- 3) Hives
- 4) Hypertensive crisis
- 5) Vascular collapse (+)

5. INACTIVATION OF LOCAL ANESTHETICS BY

- 1) kidney secretion
- 2) plasma pseudo-cholinesterase hydrolysis, liver reduction (+)
- 3) Oxidation
- 4) Liver glucosamine

6. PERIODONTITIS - THIS:

- 1) inflammatory process affecting periodontal tissue (+)
- 2) disease, with extension of the inflammatory process to the bony bone
- 3) Diffuse inflammation of tooth pulp
- 4) Dystrophic disease, with bone loss
- 5) a synonym of the periosite

7. CAUSE OF ACUTE PERIODONTIC INFLAMMATION:

- 1) acute and exacerbated chronic pulpitis (+)
- 2) deep caries
- 3) tooth mobility of the first degree
- 4) tooth retention and dystopia
- 5) acute serous lymphadenitis

8. A TYPICAL CLINICAL SYMPTOM OF ACUTE MAXILLOFACIAL PERIOSITIS IS:

- 1) mobility of several teeth in the area of inflammation
- 2) difficulty opening the mouth
- 3) infiltration of the soft tissues of the face, edema along the transitional fold
- 4) protrusion of the sublingual ridges
- 5) hyperemia, edema, and the presence of an infiltrate along the transitional fold in the area of 2-3 teeth (+)

9. PREDOMINANT LOCALIZATION OF PERIOSITIS:

- 1) the upper jaw on the palatal side
- 2) the vestibular surface of the jaws (+)
- 3) the mandibular ramus
- 4) mandible from the lingual side
- 5) retromolar area

10. THE CAUSE OF PERIOSITIS DEVELOPMENT IS:

- 1) soft tissue injury of the face, exacerbation of chronic periodontitis, epulis
- 2) fracture of the condylar process of the mandible
- 3) fibroma of the alveolar process, epulis
- 4) exacerbation of chronic maxillary sinusitis, periodontitis, fibroma of the alveolar process
- 5) exacerbation of chronic periodontitis, pericoronitis, periodontitis, and alveolitis (+)

1.2. Examples of situational tasks

Verified indicators of competence achievement: ОПК-7.1.1; ОПК-7.2.1; ОПК-12.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1; ПК-7.1.1; ПК-7.2.1

Task 1.

Patient K., 57 years old, visited a dentist with a toothache. The patient suffers from hypertension. Before visiting the dentist, the patient did not take any medications. After the examination, the doctor recommended removing the roots of the destroyed teeth 22 and 23. After injecting 1.7 ml of Ultracaine DS Forte into the transitional fold for each tooth, the patient experienced severe headache, tinnitus, heart palpitations, and feelings of fear and anxiety. Objectively: the patient is agitated; the skin and visible mucous membranes are pale; breathing is rapid, with a heart rate of 105 beats per minute and an blood pressure of 185/97 mmHg.

Questions:

1. Make a diagnosis of the acute condition.
2. Suggest a rational pharmacotherapy for the acute condition.
3. Which component of the local anesthetic Ultracaine DS could have caused the above-described emergency?
4. Give recommendations for the rational choice of local anesthetics in patients with hypertension.

ANSWER:

1. Diagnosis: hypertensive crisis.
2. In cases of hypertensive crisis with pronounced autonomic and psychoemotional symptoms, it is recommended to use metoprolol sublingually 25-50 mg once or propranolol sublingually 10-20 mg once (depending on blood pressure), and seduxen intravenously 10 mg.
3. Vasoconstrictor – epinephrine 1:100,000.
4. Patients with concomitant cardiovascular diseases are recommended to use an anesthetic without vasoconstrictor – mepivacaine, articaine or lidocaine.

1.3. Examples of test questions

Verified indicators of competence achievement: ОПК-7.1.1; ОПК-7.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1

1. Torus anesthesia (answer according to the scheme).
2. Mandibular palpation anesthesia (answer according to the scheme).
3. Stages of tooth extraction.
4. Classification of complications of wisdom teeth eruption according to E.A. Magid.

5. The doctor's tactics in case of maxillary sinus perforation.

1.4. Examples of report topics

Verifiable indicators of competence achievement: ОПК-7.1.1; ОПК-7.2.1; ОПК-12.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1

1. The Goo-Gates method of anesthesia on the mandible. Indications, contraindications, and technique.
2. The Akinozi-Vaserani method of anesthesia on the mandible. Indications, contraindications, and technique.
3. The Malamed method of anesthesia on the mandible. Indications, contraindications, and technique.
4. The Caldwell-Luc radical maxillotomy. Indications, contraindications, and technique.

1.5. Examples of control questions for the interview

Verified indicators of competence achievement: ОПК-7.1.1; ОПК-7.2.1; ОПК-12.1.1; ОПК-12.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1; ПК-6.2.1; ПК-7.1.1; ПК-7.2.1

1. Classification of local anesthetics in cartridges. Characteristics of individual drugs.
2. Local complications during tooth extraction. Clinic, diagnostics. Treatment.
3. Operation of atypical tooth extraction. Tools, technique of performance.
4. Principles of differential diagnostics of odontogenic inflammatory diseases of the jaws.
5. Perforation of the maxillary sinus floor during tooth extraction – possible causes, diagnostics, prevention. Principles of planning treatment tactics.

1.6. Examples of tasks for assessing the development of practical skills (competencies)

Verified indicators of competence achievement: ОПК-7.1.1; ОПК-7.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1; ПК-6.2.1

1. Demonstrate the technique of conductive anesthesia for upper jaw molars on the left side (on the phantom).
2. Select tools and demonstrate the technique of removing molars on the upper jaw on the left side (on the phantom).
2. Assessment tools for self-employment
The execution of independent work is carried out at EEOC VolSMU and involves preparation of reports on issues of thematic plan of autonomous work for each semester.

2.1. Example of questions for for independent work

Verifiable indicators of competence achievement: ОПК-7.1.1; ПК-5.1.1; ПК-6.1.1

№	Questions for self-report	Auditable indicators of competence achievement
5 semester		
1	Modern technologies of local anesthesia in dentistry. Instrumentation. Types of injectors. Indications, contraindications. New generation needleless injectors. Computer syringe.	ОПК-7.1.1 ПК-5.1.1 ПК-6.1.1
2	Modern technologies of general anesthesia in dentistry. Xenon anesthesia, prospects for application in dentistry.	
3	Features of pain relief in patients with concomitant pathology.	
6 semester		
1	Surgical methods of treating chronic periodontitis. Transplantation of teeth and dental buds. The current state of the problem.	ОПК-7.1.1 ПК-5.1.1 ПК-6.1.1
2	Surgical methods for treating jaw cysts.	
7 semester		
1	Boils, erysipelas, pyogenic granuloma of the face. Odontogenic migratory subcutaneous granuloma. Felinoz (Bartonellosis, "cat scratch disease"). Anthrax, noma, and other rare inflammatory diseases of the maxillofacial region. Etiology, pathogenesis, and clinical manifestations. Diagnosis and treatment.	ОПК-7.1.1 ПК-5.1.1 ПК-6.1.1
2	Operations on the maxillary sinus. Minimally invasive technologies. Indications, contraindications. Instruments, surgical access, and techniques.	
3	Specific inflammatory diseases of the maxillofacial region. HIV infections in the maxillofacial region. Diagnostics. Differential diagnostics. AIDS. Manifestations in the maxillofacial region. Clinic, diagnostics, and prevention of spread.	

3. Assessment tools for conducting intermediate certification in the discipline

Intermediate certification is conducted in the form of an exam.

Intermediate certification includes the following types of tasks: assessment of the level of formation of the practical component of the formed competencies in the defense of the case history (Рсπεц_πρακ), an interview on examination tickets, including questions on all studied sections of the program of the discipline "Surgical Dentistry" (Рπα).

3.1. Example of questions for intermediate certification

Checked indicators of achievement of the competence: ОПК-7.1.1; ОПК-7.2.1; ОПК-12.1.1; ОПК-12.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1; ПК-6.2.1; ПК-7.1.1; ПК-7.2.1

№	Questions for interim assessment	Auditable indicators of competence achievement
1.	Local complications during local anesthesia. Clinic, diagnostics. Treatment.	ОПК-7.1.1; ОПК-7.2.1; ОПК-12.1.1; ОПК-12.2.1; ПК-3.2.1; ПК-5.1.1; ПК-6.1.1; ПК-6.2.1; ПК-7.1.1; ПК-7.2.1
2.	General complications of local anesthesia.	
3.	Classification of local anesthetics. Characteristics of individual drugs.	
4.	Wound treatment after tooth removal and care.	
5.	Dynamics of healing of the hole after tooth removal.	
6.	Perforation of the bottom of the maxillary sinus during tooth removal operation - possible causes, diagnosis, prevention. Etc.	

3.2. Examination questions example.

Ministry of Health of the Russian Federation
Federal State Budgetary Educational Institution of Higher Education
Volgograd State Medical University of the Ministry of Health of the Russian Federation
Department of Surgical Dentistry and Oral and Maxillofacial Surgery
THEORETICAL PART
examination in the discipline "Surgical Dentistry"
for students of the 2022 year of admission
on the educational program 31.05.03 Dentistry,
direction (profile) Dentistry (specialization),
full-time form of study
2025-2026 academic year

SITUATIONAL TASK № 4

1. Clinical and pharmacological characteristics of modern cartridge-type anesthetics. Vasoconstrictors: mechanism of action, classification, indications and contraindications for use in local anesthetic solutions.

2. Acute odontogenic maxillary sinusitis. Etiology, clinical features, and treatment.

3. Subtemporal abscess. Topographic anatomy, routes of infection, clinic, complications, treatment.

Head of department _____

Yarygina E.N.

The full set of assessment tools for the discipline is available in the EIOS of VolgSMU at the following link(s):

<https://elearning.volgmed.ru/course/view.php?id=12162>

<https://elearning.volgmed.ru/course/view.php?id=11841>

<https://elearning.volgmed.ru/course/view.php?id=11842>

<https://elearning.volgmed.ru/course/view.php?id=11843>

<https://elearning.volgmed.ru/course/view.php?id=12169>

Reviewed at the Department of Surgical Dentistry and Oral and Maxillofacial Surgery,
Minutes of May 17, 2025, No. 9.

Head of department



Yarygina E.N.