

Federal State Budgetary Educational Institution of Higher Education
"Privolzhsky Research Medical University"
Ministry of Health of the Russian Federation

BANK OF ASSESSMENT TOOLS FOR DISCIPLINE
RECONSTRUCTIVE MAXILLOFACIAL SURGERY

Training program (specialty): 31.05.03 DENTISTRY

Department: ORAL AND MAXILLOFACIAL SURGERY

Mode of study FULL-TIME

Nizhniy Novgorod
2021

1. Bank of assessment tools for the current monitoring of academic performance, mid-term assessment of students in the discipline

This Bank of Assessment Tools (BAT) for the discipline "RECONSTRUCTIVE MAXILLOFACIAL SURGERY" is an integral appendix to the working program of the discipline "RECONSTRUCTIVE MAXILLOFACIAL SURGERY". All the details of the approval submitted in the WPD for this discipline apply to this BAT.

2. List of assessment tools

The following assessment tools are used to determine the quality of mastering the academic material by students in the discipline/ practice:

No.	Assessment tool	Brief description of the assessment tool	Presentation of the assessment tool in the BAT
1	Test tasks	A system of standardized tasks that allows you to automate the procedure of measuring the level of knowledge and skills of a student	Bank of test tasks
2	Situational tasks	A method of control that allows you to assess the criticality of thinking and the degree of the material comprehension, the ability to apply theoretical knowledge in practice.	List of tasks

3. A list of competencies indicating the stages of their formation in the process of mastering the educational program and the types of evaluation tools

Code and formulation of competence*	Stage of competence formation	Controlled sections of the discipline	Assessment tools
UC -1 PC-6 PC-7	Current, Mid-term	Bone surgery on the jaw.	Test tasks Situational tasks Types of facial defects and deformations, causes of their occurrence. Congenital defects, developmental anomalies, deformations related to growth disruption of various parts of the face. Defects and deformations of the maxillofacial area as a result of injuries, gunshot wounds, burns, inflammatory diseases. The use of materials (biocomposites) in facial reconstructive surgery. Contour plastic to correct the external features of the face in case of defects and deformations. Bone plaster of jaws. Types and causes of defects of the mandible. Indications for bone plaster. Biological substantiation of bone plasty. Types of transplants. Applications of preserved bone and conservation techniques. Autococity transplant to repair mandibular defects. Prep for surgery. Methods of fixing transplants

			<p>and mandibular fragments during osteoplastic operations (titanium miniplates, titanium reconstructive rods, metal with memory shape, splints, positioners, bimacilic tires, extraoral apparatus).</p> <p>Post-operative management of the patient, his rehabilitation.</p> <p>Combined bone plasty.</p>
<p>UC -1 PC-6 PC-7</p>	<p>Current, Mid-term</p>	<p>Plastic surgery with local tissues.</p> <p>Plastic with flaps of fabric from remote areas.</p> <p>Plastic with free tissue transfer.</p> <p>Application of complex complexes</p>	<p>Test tasks</p> <p>Situational tasks</p> <p>Plastic by local fabrics taken next to the defect, "leg flaps" taken from nearby tissues. Advantages, disadvantages, indications, contraindications.</p> <p>Application of typical methods of plastic with local fabrics to eliminate lip defects and the undercut area.</p> <p>Replacement of lip defects with flaps from the cheeks, from the nasolabial furrow, from the other lip, shortening the lip and tongue bridle.</p> <p>Mathematical substantiation of planning of plastic operations with local tissues (A.A. Limberg).</p> <p>Application of symmetrical, asymmetrical and combined shapes.</p> <p>Plastic flaps of tissues from remote areas.</p> <p>Development and introduction into practice of round stem flap (flap V.P.Filatov). Biological basis for its use. Use of round stem flap to replace defects of various facial and oral cavities.</p> <p>Formation of the nose from the fabrics of a round stem flap according to the method of F.M.Khitrov.</p> <p>Plastic with free tissue transfer. Modern understanding of biological processes that occur in free transplantation of tissues and organs.</p> <p>Possibilities of application of auto-, allograft of various tissues, implants, endoprostheses in maxillofacial surgery.</p> <p>Free skin graft. Biological basis. Use to eliminate wound and granulating surfaces on the face and in the oral cavity of various types of skin flaps (thin, split, in full thickness).</p> <p>Transplantation of cartilage as a base material and for correcting the contours of different parts of the face. Use of autoclave, corpse preserved cartilage.</p> <p>Применение сложных тканевых complexes on a microvascular anastomosis.</p> <p>Types of flaps. Characteristics of donor zones. Indications, contraindications, advantages, disadvantages. Possibilities of the method.</p>

UC -1 PC-6 PC-7	Current, Mid-term	Gnathic surgery.	<p>Surgical treatment for jaw deformation. Malformation and deformation of the jaws. The main types of deformations of the jaws: underdevelopment (micrognathia) or excessive development (macrognathia) of the upper or lower jaw or parts thereof (prognathia and retrognathia), open bite.</p> <p>Clinical manifestations of defects and deformities, functional and aesthetic disorders. Indications for surgical treatment.</p> <p>Deformation analysis, advanced diagnostics with telex.</p> <p>Basic methods of operations to correct the size and shape of the mandible.</p> <p>Operative correction of the shape and position of the upper jaw.</p> <p>Features of operational technique, immobilization and postoperative management, prosthetics and rehabilitation of patients after intervention about deformations of the jaws.</p> <p>Contoured plastic to correct the shape of the face and jaws.</p>
UC -1 PC-6 PC-7	Current, Mid-term	Aesthetic surgery	<p>Definition of aesthetic surgery The aesthetic proportions of the face.</p> <p>Indications and contraindications for aesthetic facial surgery.</p> <p>Wrinkles of face and neck. Clinic, diagnosis, classification, treatment. Deformation of the ear. Clinic, diagnosis, classification, treatment. Nasal deformities. Congenital and acquired. Clinic, diagnosis, classification, treatment.</p>

4. The content of the assessment tools of entry, current control

Current control is carried out by the discipline teacher when conducting classes in the form of: assessment tool.

Assessment tools for current control.

Assessment tool 1. OSSEOINTEGRATION IS

- 1) direct structural and functional relationship between highly differentiated living bone and the surface of the supporting implant, detected at the level of light microscopy
- 2) the body's reaction to the introduction of a foreign body consists in the formation of a fibrous capsule around it
- 3) the process of formation of connective tissue on the implant surface
- 4) the reaction of the bone to a foreign body that is encapsulated by a bone scar
- 5) reduction of the total volume of bone tissue

Assessment tool 2. BIOINERT MATERIALS INCLUDE

- 1) stainless steel
- 2) chromocobalt alloys

- 3) titanium, zirconium
- 4) hydroxyapatite
- 5) silver-palladium alloys

Assessment tool 3. CHLO DAMAGES BY THE MECHANISM OF DAMAGE ARE DIVIDED INTO:

- 1) neognestrelnye and firearms
- 2) single and multiple.
- 3) penetrating and non-penetrating into the CHLO cavity
- 4) combined.
- 5) isolated and combined

Assessment tool 4. WITH THE MAXIMUM OPENING OF THE MOUTH, THE HEAD OF THE LOWER JAW IS NORMALLY:

- 1) on the posterior slope of the articular tubercle
- 2) on the anterior slope of the articular tubercle
- 3) in the articular cavity
- 4) outside the articular cavity
- 5) all answers are incorrect

Assessment tool 5. MUSCLES ARE ATTACHED TO THE ZYGOMATIC ARCH AND BONE:

- 1) medial pterygoid, lateral pterygoid, chewing
- 2) temporal, medial and lateral pterygoid
- 3) masticatory, temporal, lateral pterygoid
- 4) chewing, temporal
- 5) chewing, medial pterygoid

Assessment tool 6. PLATE SEAMS ARE APPLIED IN THE FOLLOWING CASES:

- 1) a small but deep wound, the formation of necrotic flaps, inflammatory infiltration in the walls of the wound
- 2) extensive festering wound, phlegmon, numerous flaps of soft tissues
- 3) formation of large flaps, bleeding from the wound, beriberi with.
- 4) a wide wound in the corner of the mouth, a phlegmonous process around it, beriberi D
- 5) extensive soft tissue defect, the presence of large flaps, inflammatory infiltration in the walls of the wound

Assessment tool 7. ONCOLOGICAL ALERTNESS IS UNDERSTOOD AS KNOWLEDGE:

- 1) early symptoms of the disease
- 2) drugs for treatment
- 3) professional difficulties
- 4) permissible doses of radiation therapy
- 5) location of cancer services

Assessment tool 8. SARCOMAS DEVELOP FROM

- 1) epithelium
- 2) glandular tissue
- 3) connective tissue
- 4) blood
- 5) any fabrics

Assessment tool 9. THE CLINICAL PICTURE OF AMELOBLASTOMA IS CHARACTERIZED BY:

- 1) rapid growth

- 2) swelling of the jaw
- 3) the phenomena of paraesthesia
- 4) soreness during percussion of teeth

Assessment tool 10. THE MAIN SYMPTOM OF TRIGEMINAL NEURALGIA:

- 1) Vincent's symptom
- 2) prolonged paresthesia
- 3) prolonged aching pains
- 4) short-term paresthesia
- 5) severe short-term paroxysmal pains

Assessment tool 11. ACUTE TMJ ARTHRITIS MUST BE DIFFERENTIATED FROM

- 1) acute otitis media
- 2) acute sinusitis
- 3) parotid hyperhidrosis
- 4) fracture of the upper jaw
- 5) submandibular phlegmon

Assessment tool 12. WHEN CUTTING OUT THE FLAP ON THE LEG, THE RATIO OF ITS WIDTH TO LENGTH SHOULD BE

- 1) 1:3
- 2) 1:4
- 3) 31:5
- 4) 1:8
- 5) 2:3

Assessment tool 13. AN INDICATION FOR PRIMARY BONE GRAFTING IS A JAW DEFECT AFTER

- 1) periostitis
- 2) sequestrectomy
- 3) post-radiation necrectomy
- 4) sclerosing therapy
- 5) removal of benign tumors

4.1. Tasks for the assessment of competence " UC -1" (*specify the competence code*):

Task number 1.

The patient, 28 years old, complained about the presence of swelling in the area of the alveolar process of the upper jaw on the left, which she discovered by accident. The mouth opens freely. In the area of the alveolar process of the upper jaw on the left in projection 2.2, 2.3, deformation due to swelling is determined, painless on palpation. 2.2, 2.3, 2.4 are intact. X-ray examination determines the area of rarefaction of bone tissue with clear boundaries, shaped like an inverted pear, located between 2.2 and 2.3. The roots of the teeth are spread apart, their periodontal gap is preserved. EDI is within the normal range.

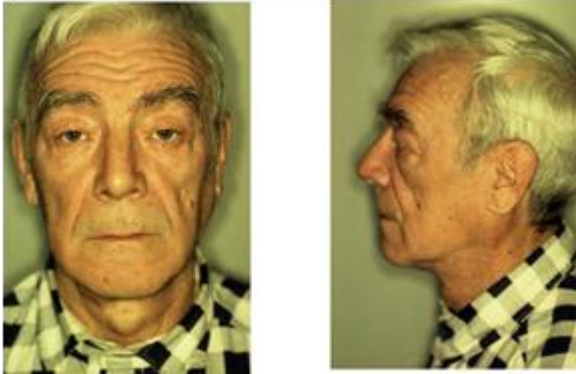
Questions and tasks:

- 1) What kind of disease can you think about?
- 2) What is the treatment?
- 3) What kind of dental preparation is necessary before surgical treatment?
- 4) What is the approach of surgical intervention?
- 5) What method of surgical treatment is indicated in this case?

4.2. Control work for the assessment of competence " PC-6, PC-7" (*specify the competence code*):

Task number 2.

Pleomorphic adenoma of the parotid salivary gland is removed.



1. by the method of peeling from the shell
2. with the isolation and preservation of the branches of the facial nerve
3. with an area of skin and muscle adjacent to the tumor
4. with preliminary radiation preparation
5. followed by radiation and chemotherapy

4.3. Questions for colloquiums, interviews (*specify the competence code*): PC-6, PC-7

1. Types of facial defects and deformations, causes of their occurrence. Congenital defects, developmental anomalies, deformations related to growth disruption of various parts of the face.
2. Defects and deformations of the maxillofacial area as a result of injuries, gunshot wounds, burns, inflammatory diseases. The use of materials (biocomposites) in facial reconstructive surgery.
3. Contour plastic to correct the external features of the face in case of defects and deformations.
4. Bone plaster of jaws. Types and causes of defects of the mandible. Indications for bone plaster.
5. Biological substantiation of bone plasty. Types of transplants. Applications of preserved bone and conservation techniques.
6. Autococity transplant to repair mandibular defects.
7. Prep for surgery. Methods of fixing transplants and mandibular fragments during osteoplastic operations (titanium miniplates, titanium reconstructive rods, metal with memory shape, splints, positioners, bimacilic tires, extraoral apparatus).
8. Post-operative management of the patient, his rehabilitation. Combined bone plasty.
9. Plastic by local fabrics taken next to the defect, "leg flaps" taken from nearby tissues. Advantages, disadvantages, indications, contraindications.
10. Application of typical methods of plastic with local fabrics to eliminate lip defects and the undercut area. Replacement of lip defects with flaps from the cheeks, from the nasolabial furrow, from the other lip, shortening the lip and tongue bridle.
11. Mathematical substantiation of planning of plastic operations with local tissues (A.A. Limberg). Application of symmetrical, asymmetrical and combined shapes.
12. Plastic flaps of tissues from remote areas. Development and introduction into practice of round stem flap (flap V.P.Filatov). Biological basis for its use. Use of round stem flap to replace defects of various facial and oral cavities.
13. Formation of the nose from the fabrics of a round stem flap according to the method of F.M.Khitrov.
14. Plastic with free tissue transfer. Modern understanding of biological processes that occur in free transplantation of tissues and organs.
15. Possibilities of application of auto-, allograft of various tissues, implants, endoprostheses in maxillofacial surgery.

16. Free skin graft. Biological basis. Use to eliminate wound and granulating surfaces on the face and in the oral cavity of various types of skin flaps (thin, split, in full thickness).
17. Transplantation of cartilage as a base material and for correcting the contours of different parts of the face. Use of autoclave, corpse preserved cartilage.
18. Types of flaps. Characteristics of donor zones. Indications, contraindications, advantages, disadvantages. Possibilities of the method
19. Surgical treatment for jaw deformation. Malformation and deformation of the jaws. The main types of deformations of the jaws: underdevelopment (micrognathia) or excessive development (macrognathia) of the upper or lower jaw or parts thereof (prognathia and retrognathia), open bite.
20. Clinical manifestations of defects and deformities, functional and aesthetic disorders. Indications for surgical treatment. Deformation analysis, advanced diagnostics with teleroentgenography. Basic methods of operations to correct the size and shape of the mandible.
21. Operative correction of the shape and position of the upper jaw. Features of operational technique, immobilization and postoperative management, prosthetics and rehabilitation of patients after intervention about deformations of the jaws.
22. Contoured plastic to correct the shape of the face and jaws.
23. Definition of aesthetic surgery. The aesthetic proportions of the face. Indications and contraindications for aesthetic facial surgery.
24. Wrinkles of face and neck. Clinic, diagnosis, classification, treatment. Deformation of the ear. Clinic, diagnosis, classification, treatment. Nasal deformities. Congenital and acquired. Clinic, diagnosis, classification, treatment.

4.4. Tasks (assessment tools) for the exam/credit

The full package of examination tasks/tasks is given (*specify the competence code*):

Assessment tool 1. OSSEOINTEGRATION IS

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THIS X-RAY PICTURE MAY CORRESPOND TO

1. primary cancer of the lower jaw
 2. chronic osteomyelitis of the lower jaw
 3. fibrotic dysplasia of the mandible
 4. osteogenic sarcoma of the lower jaw
 5. peripheral giant cell reparative granuloma
- 5. The content of the assessment tools of mid-term assessment**



Mid-term assessment is carried out in the form of a credit

5.1 The list of control tasks and other materials necessary for the assessment of knowledge, skills and work experience (*the teacher indicates only those tasks and other materials that are used within the framework of this discipline*)

5.1.1. Questions for the credit in the discipline

Question	Competence code (according to the WPD)
1	Surgical treatment for jaw deformation.
2	Malformation and deformation of the jaws.
3	The main types of deformations of the jaws: underdevelopment (micrognation) or excessive development (macrognation) of the upper or lower jaw or parts thereof (prognostia and retrognathia), open bite.
4	Clinical manifestations of defects and deformities, functional and aesthetic

	disorders. Indications for surgical treatment.
5	Deformation analysis, advanced diagnostics with telex.
6	Basic methods of operations to correct the size and shape of the mandible.
7	Operative correction of the shape and position of the upper jaw.
8	Features of operational technique, immobilization and postoperative management, prosthetics and rehabilitation of patients after intervention about deformations of the jaws.
9	Contoured plastic to correct the shape of the face and jaws.

6. Criteria for evaluating learning outcomes

Learning outcomes	Evaluation criteria	
	Not passed	Passed
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes.	The level of knowledge in the volume corresponding to the training program. Minor mistakes may be made
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes.	Basic skills are demonstrated. Typical tasks have been solved, all tasks have been completed. Minor mistakes may be made.
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes.	Basic skills in solving standard tasks are demonstrated. Minor mistakes may be made.
Motivation (personal attitude)	Educational activity and motivation are poorly expressed, there is no willingness to solve the tasks qualitatively	Educational activity and motivation are manifested, readiness to perform assigned tasks is demonstrated.
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve practical (professional) tasks. Repeated training is required	The competence developed meets the requirements. The available knowledge, skills and motivation are generally sufficient to solve practical (professional) tasks.
The level of competence formation*	Low	Medium/High

* - not provided for postgraduate programs

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
Completeness of knowledge	The level of knowledge is below the minimum requirements. There were bad mistakes	The minimum acceptable level of knowledge. A lot of light mistakes were made	The level of knowledge in the volume corresponding to the training program. A few light mistakes were made	The level of knowledge in the volume corresponding to the training program, without errors

Learning outcomes	Assessment of competence developed			
	unsatisfactory	satisfactory	good	excellent
Availability of skills	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	Basic skills are demonstrated. Typical problems with light mistakes have been solved. All tasks have been completed, but not in full.	All basic skills are demonstrated. All the main tasks have been solved with light mistakes. All tasks have been completed, in full, but some of them with shortcomings	All the basic skills were demonstrated, all the main tasks were solved with some minor shortcomings, all the tasks were completed in full
Availability of skills (possession of experience)	Basic skills are not demonstrated when solving standard tasks. There were bad mistakes	There is a minimal set of skills for solving standard tasks with some shortcomings	Basic skills in solving standard tasks with some shortcomings are demonstrated	Skills in solving non-standard tasks without mistakes and shortcomings are demonstrated
Characteristics of competence formation*	The competence is not fully formed. The available knowledge and skills are not enough to solve professional tasks. Repeated training is required	The formation of competence meets the minimum requirements. The available knowledge and abilities are generally sufficient to solve professional tasks, but additional practice is required for most practical tasks	The formation of competence generally meets the requirements, but there are shortcomings. The available knowledge, skills and motivation are generally sufficient to solve professional tasks, but additional practice is required for some professional tasks	The formation of competence fully meets the requirements. The available knowledge, skills and motivation are fully sufficient to solve complex professional tasks
The level of competence formation*	Low	Below average	Intermediate	High

For testing:

Mark "5" (Excellent) - points (100-90%)

Mark"4" (Good) - points (89-80%)

Mark "3" (Satisfactory) - points (79-70%)

Less than 70% – Unsatisfactory – Mark "2"

Developer(s):
Full name, position, academic degree, academic title