

Study program: Integrated Academic Studies in Dental Medicine
Course title: Oral Surgery with Implantology 1
Teacher: Siniša M. Mirkovic, Ivan N. Šarčev, Branislav V. Bajkin, Ana Tadić
Course status: compulsory
ECTS Credits: 7
Condition: -
<p>Course aim</p> <p>Mastering the theoretical knowledge and practical skills application of local anesthesia in dental practice. Prevention, identification and treatment of complications of local anesthesia. Selection of local anesthetics.</p>
<p>Expected outcome of the course:</p> <p>Adoption of theoretical knowledge in the domain of dental anesthesia in preparation for practical work in dental practice. Learning practical skills in the application of local, regional and general anesthesia in dental practice.</p>
<p>Course description</p> <p><i>Theoretical education:</i></p> <p>1. Introduction. The concept and objectives of oral surgery. Role of oral surgery in dental care system and education of students. 2. Applied surgical anatomy. Osteology of the upper and lower jaw. Morphology of tooth root. Chewing and mimical musculature. Innervation zones and vascularization of the upper and lower jaws. 3. Tooth extraction. Indications and contraindications for tooth extraction. Principles of tooth extraction. The stages of uncomplicated tooth extraction. 4. Tooth extraction. Instruments for tooth extraction (pliers, levers). Extraction of individual teeth. 5. Complications of tooth extraction. Fractures of teeth - roots. Separation of the roots. Root extraction levers. Soft tissue injuries. Foreign bodies. 6. Wound healing after tooth extraction. Stages of normal wound healing. Delayed healing of wounds. Post-extraction pain, swelling. Alveolitis. 7. Injuries of teeth, alveolar ridge and jaws during tooth extraction. Tooth injuries. Alveolar ridge and tuberosity fractures. Jaw fractures. Luxation of the mandible. 8. Bleeding after tooth extraction. Working protocol, procedures and methods for stopping bleeding. 9. Hemostasis and haemostatic disorders. Patients on anticoagulation therapy. Hemophilia. Thrombocytopenia. Liver diseases. 10. Oroantral communication. Procedures and measures for the diagnosis and management of oroantral communications. 11. Dentogenic infections. Concept and types of dentogenic infections. Microflora. Asepsis and antisepsis. 12. Dentogenic infection. Clinical features and diagnosis. Spreading pathways and anatomical spaces. 13. Dentogenic infection. Basic therapeutic principles (drugs and surgical treatment). 14. X-ray diagnosis. X-ray techniques in dentistry. Indications for X-ray. X-ray anatomy and pathology. Potential errors. 15. Emergency conditions in oral surgery. Loss of consciousness. Allergy. Emergency cardiovascular conditions. Hypovolemic shock. Resuscitation procedures. 16. Basic principles of oral surgery. Specificities of surgical procedure in the oral cavity. Forensic aspects of oral surgery. 17. Designing of incisions in dentoalveolar surgery. Indications and contraindications for the selection of the incision. 18. Impacted supernumerary teeth. The concept and definition. Etiological factors. Incidence. Clinical features and diagnosis. 19. Impacted supernumerary teeth. Classification. Indications and contraindications for extraction. 20. Impacted supernumerary teeth, Residual roots and foreign bodies. The course of surgical removal. Wound management and early postoperative course. 21. Surgical orthodontic cooperation. The scope of cooperation in oral surgery. Chronological order and types of interventions. Orthodontic preparation and indication for operation. Failures of cooperation. 22. Chronic periapical lesions. The concept and definition. Microflora. Clinical features and diagnosis. Differential diagnosis. 23. Tooth root resection. Indications for operation. Preoperative preparation of the tooth. Techniques. Types of channel closure teeth. 24. Jaw cysts. The concept and definition. Classification. Clinical picture, diagnosis and surgical treatment. Postoperative monitoring. 25. Prosthetic-surgical cooperation. The scope of cooperation in oral surgery. Classification of deformities. Bone structure disorders. Soft structure disorders. Combined disorders. 26. Prosthetic surgical cooperation. Types of oral surgical procedures. Specificities of operative procedures and postoperative treatment. 27. Fundamentals of oral implantology. Indications for surgery. Types of implants. Complications and definition of periimplantitis. 28. Benign tumors of bone and soft tissue. Definition. Classification. Incidence. Clinical picture. Specific surgical treatment. 29. Oral-surgical aspects of facial pain. Acute and chronic pain. Painful syndromes. Idiopathic trigeminal neuralgia. Temporomandibular joint and the importance of supporting zones loss. 30. Oral surgical aspects of patient risk. Specificities of individual diseases indicated for oral surgery. Patients with bacterial endocarditis, cardiac rhythm disorders, endocrine disorders and liver diseases.</p> <p><i>Practical education:</i></p> <p>1. Introductory Pract. The demonstration. Working place. Admission and triage of patients. Medical History. Clinical examination. Sterilization and sterility protection. Protective equipment. Instruments for tooth extraction. Tooth extraction techniques and anesthesia.</p>

2. Test - Innervation zone. Techniques giving plexus anesthesia and mandibular anesthesia indirect method.
3. Test - history, examination instruments, dental extraction, tooth extraction.
4. Practical work with patients – An overview. Diagnostics. X-ray analysis. Anesthesia. Tooth extraction. Complications management. Treatment of acute dentogenic infections.
5. Demonstration Pract. – Demonstration and assisting when performing oral surgical procedures in the operating room

Literature

Compulsory

1. Miloro M, Ghali GE, Larsen PE, Waite PD. Peterson’s Principles of Oral and Maxillofacial Surgery. Third ed. USA, People s Medical Publishing House 2012.
2. Fragikos D. Oral Surgery. Springer 2007.

Additional

1. Hupp JR, Ellis E III, Tucker MR. Contemporary Oral and Maxillofacial Surgery, Sixth ed. Mosby, St Louis 2013

Number of active classes	Theoretical: 45	Practice: 105
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Teaching methods

Lectures and practical.

Student activity assessment (maximally 100 points)

Pre-exam activities	points	Final exam	points
Lectures	10	Written	60
Practices	10	Oral	
Colloquium	20		
Essay			