**IP UNIVERSITATEA DE STAT DE MEDICINĂ ŞI FARMACIE**

**„NICOLAE TESTEMIŢANU”**

**FACULTATEA DE STOMATOLOGIE**

**CATEDRA DE CHIRURGIE ORO-MAXILO-FACIALĂ**

**ȘI IMPLANTOLOGIE ORALĂ „ARSENIE GUȚAN”**

**Elaborări metodice**

**Anul IV, semestrul VIII**

**Implantologia orală**

***(engleză)***

**TOPICS OF PRACTICAL LESSONS**

**for the 4th year students semester VIII**

**Oral Implantology course**

1. Instruments and equipment in used oral implantology. Implant types presentation with their components. Patients file and factors that influence the process of osseointegration.
2. Local and general clinical aspects of the patients in preimplantation balance. Anatomical evaluation of maxillary and mandibular arches correlated with the technique and type of implants.
3. Current techniques in oral implantology. Surgical techniques in conducted bone reconstruction of deficient alveolar ridges.
4. Surgical technique of sinus-lifting in oral implantology.
5. Accidents, incidents and complications in oral implantology.

 **Șef catedră, dr.șt.med., conf. univ. Chele Nicolae**

 **Șef studii, asist. univ. Motelica Gabriela**

Topic Nr. 1 ( IV year, VIII semester )

***Theme:******Instruments and equipment in used oral implantology.***

Work place: Dental Clinic Nr.2.

Purpose: instruments presentation and manner of their use by the types of implants, physiodispenser presentation and its operating mode.

Control questions:

1. History of armamentarium for dental implants.
2. Instruments used for patient examination.
3. Special instruments for oral implantology: burs, handpieces, keys for implant screwing and their components.
4. Additional armamentarium(scalpel blades, periosteal elevator, retractors, hemostats, rongeur forceps, chisel and mallet, periapical curette, moderate-speed handpiese, needle holders, suture needle, different scissors).
5. Peculiarities of different instruments in oral implantology.
6. Way of functioning of physiodispenser.

Topic Nr. 2 ( IV year, VIII semester )

***Theme:******Implant types presentation with their components.***

Work place: Dental Clinic Nr.2.

Purpose: screw, cylinder, blade implants with prosthetic components and for the transfer impression, manner of use explanation

Control questions:

1. Brief history in oral implantology.
2. Types of implants used in oral implantology.
3. Description of component parts of dental implants.
4. Endosseous implants, classification.
5. Titanum and its use in implantology.
6. Surgical steps of endosseous implants fixation.
7. The aim of hygien -----in oral implantology.

Topic Nr. 3 IV year, VIII semester)

***Theme:******Patients file and factors that influence the process of osseointegration.***

Work place: Dental Clinic Nr.2.

Purpose: the type of patient’s file, its content and value, relation doctor-patient, specific legislation.

Control questions:

1. Characteristic and the content of patients medical file in oral implantology.
2. Paraclinical investigation used for diagnostics and implanto-prosthetical treatment.
3. Doctors and patients preparation for the implant surgery.
4. Techniques and requirements of anesthesia used in oral implantology.
5. Local factors that influence the process of osseointegration.
6. Osseointegration. Concept development of osseointegration.
7. Bone density practical importance for oral implants.

Topic Nr. 4 ( IV year, VIII semester)

***Theme:******Local and general clinical aspects of the patients in preimplantation balance.***

Work place: Dental Clinic Nr.2.

Purpose: general balance of the patient, collaboration with other specialties, loco-regional balance with need and bone offer establishment, the balance of oral status of the patient, measures of preimplantation therapy, establishment of the type of prosthesis on implants and type and number of necessary implants.

Control questions:

1. Bony structure of superior and inferior jaw. Age changes.
2. Correlation of superior teeth roots with the floor of maxillary sinus and nasal cavity.
3. Correlation of inferior teeth roots with mandibular canal.
4. Biological principles related to the endosseous dental implants.
5. Biomechanical principles related to the endosseous dental implants.
6. Local factors that can influence the contraindications in oral implantology.
7. General balance of the patients. Collaboration with other specialties.
8. Correlation of implant diameter with osseous offer.
9. Planning the number of implants depending on the dental gaps.

Topic Nr. 5 ( IV year, VIII semester)

***Theme:******Anatomical evaluation of maxillary and mandibular arches correlated with the technique and type of implants.***

Work place: Dental Clinic Nr.2.

Purpose: analysis of bone tender, position of specific anatomical elements such as: mental orifice, mandibular canal, maxillary sinus, anterior nasal spine, nasal fossa floor, bone resorption degree of alveolar ridges, structural analysis of bone tender, occluso-articular existing imbalances and measures of their redress.

Control questions:

1. Correlation of superior teeth roots with the floor of maxillary sinus and nasal cavity.
2. Correlation of inferior teeth roots with mandibular canal.
3. Bone structure of the mandible and changes related with age.
4. The structure of alveolar walls of the mandible.
5. The path of mandibular canal and its relation to inferior teeth.
6. Correlation of implant diameter with osseous offer.
7. Planning the number of implants depending on the dental gaps.

Topic Nr. 6 ( IV year, VIII semester)

***Theme:******Current techniques in oral implantology.***

Work place: Dental Clinic Nr.2.

Purpose: general techniques for implant insertion, principles of bone milling, principles of gingival mucosa surgery, video tape 30 minutes with these techniques and explanation.

Control questions:

1. Methods of endosseous implants fixation.
2. Types of sutures used in oral implantology.
3. Indications for dental implants.
4. Contraindications for dental implants.
5. Applied surgical principles for endosseous implants fixation.
6. Determination of primary and secondary endosseous implants stability.
7. Principles and types of incisions used in oral implantology.
8. Posoperative patient management after implant fixation.
9. Requirements for suture types used in oral implantology.

Topic Nr. 7 ( V year, IX semester )

***Theme:******Surgical techniques in conducted bone reconstruction of deficient alveolar ridges.***

Work place: Dental Clinic Nr.2.

Purpose: principles of bone regeneration, applied techniques and materials, resorbable and nonresorbable membranes, implants use for graft fixation into receiving bone. Video films with explanations that present the dynamics stages and techniques of conducted bone regeneration.

Control questions:

1. Creation of bone offer for implant fixation using osseous grafts.
2. Augumentation materials applied in oral implantology.
3. Conducted elongation of alveolar ridges.
4. Osteoplasty of local addition.
5. Local areas for osseous blocks preparation.
6. Enlargement of existing bone offer. Surgical technique.
7. Displacement of alveolar inferior nerve for endosseous implants fixation.
8. Biomaterials used in implantology.
9. Requirements to osteoplastic materials applied in implantology.

Topic Nr. 8 ( IV year, VIII semester)

***Theme:******Surgical technique of sinus-lifting in oral implantology.***

Work place: Dental Clinic Nr.2.

Purpose: principles of sinus floor elevation, used techniques, filling materials, video tape 30 minutes with theoretical and practical data and explanation.

Control questions:

1. Elevation of sinusal mucous membrane for implant fixation.
2. Operative technique of transcrestal and lateral sinus-lifting.
3. Indications for transcrestal and lateral sinus-lifting.
4. Contraindications for transcrestal and lateral sinus-lifting.
5. Advantages of transcrestal and lateral sinus-lifting.
6. Disadvantage of transcrestal and lateral sinus-lifting.
7. Intra- and post-operative accidents and complications of transcrestal and lateral sinus-lifting.
8. Armamentarium used for transcrestal and lateral sinus-lifting.

Topic Nr. 9 ( IV year, VIII semester)

***Theme:******Accidents, incidents and complications in oral implantology.***

Work place: Dental Clinic Nr.2.

Purpose: presentation with explanations of a video film with different clinical cases.

Control questions:

1. Accidents and complication during implant fixation.
2. Accidents and complication after the period of implant osseointegration.
3. Complications appeared during the osseointegration period.
4. Complications that can occur after the osseointegration period.
5. Belated complications of dental implants.

Topic Nr. 10 ( V year, IX semester )

***Theme:******Insertion of a screw implant.***

Work place: Dental Clinic Nr.2.

Purpose: obligatory each student apply 1-2 screw implants into calf rib and demonstrates types of sutures applied in oral implantology.

***Generalization.***