**Periodontal Diseases**

**The fourth course year**

**Interactive seminaries**

1. Anatomy of marginal periodontal tissues. The role and function of the periodontal tissues in stomatognathic system. Regulation of tissue turnover in the periodontium. Periodontal prevention with particular emphasis on individualisation methods of mechanical supragingival plaque control (replay of the II and III year).
2. Clinical periodontal examination. Clinical and epidemiological indicators. Evaluation of the oral hygiene, the intensity and extent of inflammation, pocket depth and probing attachment level, furcation involvement,, degree of tooth mobility. Protocol of the periodontal examination. Assessment of multifactorial periodontal risk (PRA). Periodontal chart
3. Etiologic determinants of periodontal disease. Dental plaque and bacterial biofilm. The role of host factors in periodontal disease. Risk factors for periodontal disease. Mechanisms of destruction of periodontal tissues. Etiology and risk factors peri-implant pathology.
4. Diagnosis of periodontal disease. Contemporary periodontal classification according AAP. The influence of general diseases on periodontal tissues. Clinical differentiation of gingivitis and periodontitis, differentiation of periodontitis. Definitions of periodontitis. Clinical features and diagnosis of peri-implant pathology.
5. Radiological diagnosis of periodontitis and peri-implantitis. Microbiological, immunological and genetic tests in diagnosis of periodontitis. Examination of gingival fluid, saliva, gingival tissues and blood serum- what we are looking for in the diagnosis of periodontitis?
6. Methodology for assessing the relationship between the risk factor and disease. The relationship between periodontal inflammation and cardiovascular disease, diabetes mellitus, adverse pregnancy outcomes and other general diseases. Periodontology based on evidence.
7. The use of antiseptics in the control of dental biofilm. Active agents for chemical biofilm control. Clinical indications for chemical plaque control Treatment of gingivitis.
8. The methodology of classical non-surgical treatment of periodontitis, the basic treatment: instruments, scaling, root-planning (SRP) and closed curettage - a repeat of the year III. Clinical and microbiologic outcomes following SRP. Possibilities and limitations of non-surgical periodontal treatment.
9. Alternative protocols of non-surgical periodontal treatment: full mouth disinfection, local administration of antimicrobial agents, modulation of host response, subgingival air polishing, Vector system. Conservative treatment of periimplantitis, cumulative interceptive supportive therapy- CIST.
10. Photodynamic therapy in the treatment of periodontitis. Er:YAG, diode nad Nd:YAG in non-surgical therapy of periodontitis. Laser assisted new attachment procedure- LANAP. Ability to critically evaluate novelties in periodontal treatment.
11. Systemic antibiotics in therapy of periodontitis- indications and contraindications, principles of antibiotics use in periodontitis, specific characteristics of the periodontal infections, timing of systemic antibiotic corrective phase of periodontitis treatment.
12. Management of acute periodontal lesions: treatment of necrotizing periodontal disease, abscesses in the periodontium and endo-perio lesions.
13. Maintenance phase in the complex treatment of periodontitis.

**Lectures**

1. Etiology of periodontal diseases. Dental biofilms and periodontal infections. Immunoregulation in periodontitis. Genetic susceptibility to periodontitis.
2. Clinical pictures of periodontal and peri-implant pathology.
3. Indications and protocols of non-surgical periodontal therapy

**Seminars**

1. Clinical and epidemiological periodontal examination. Epidemiology of periodontal diseases. Risk factors for periodontitis and periimplantitis.

2. Effect of periodontitis on general health according contemporary knowledge.

3. Additional examinations in periodontology.

4. Treatment planning protocols of generally healthy patients with periodontal diseases.

5. Treatment planning protocols of periodontal patients with selected systemic diseases.

**Practical exercises**

1. Periodontal examination with oral hygiene instruction and possible correction of incorrect fillings-10. .
2. Estimation of the individual periodontal risk in multivariate model-2.
3. Removal of supragingival dental calculus and dental polishing -10.
4. Supragingival air-polishing- 1.
5. Local anesthesia-5.
6. Subgingival scaling with root planning and closed curettage -5.
7. Alternative protocols of non-surgical periodontal treatment: full mouth disinfection, Vector, subgingival air polishing, local drug delivery, photodynamic therapy- 2.
8. Elimination of excessive sensitivity of dentin-3.

**Required literature**

**Basic literature**

 H-P Mueller: Periodontology. The Essentials. 2 edition. Georg Thieme Verlag 2016.

**Additional literature**

Lindhe, Lang: Clinical periodontology and implant dentistry. 6 edition. Wiley Blackwell 2015.

Wrocław, 8.02.2018