

STATE EXAM – SYLLABUS

Periodontology and Oral Diseases Department

1. Macroscopic and microscopic anatomy of gingiva and periodontal ligament. Blood supply. Correlation of clinical and microscopic features.
2. Macroscopic and microscopic anatomy of cementum and alveolar bone. Functions. Osseous topography.
3. Gingival crevicular fluid – composition, clinical significance. Cellular and humoral activity in gingival crevicular fluid and saliva.
4. Etiology of periodontal diseases. Dental biofilm. Structure. Accumulation. Factors, affecting plaque formation.
5. Microbiologic specificity of periodontal diseases. Nonspecific, specific, and ecologic plaque hypotheses. Periodontopathic bacteria.
6. Natural and iatrogenic plaque retentive factor – significance in the etiology of plaque induced diseases of periodontium. Dental calculus. Composition. Formation. Etiologic and clinical significance.
7. Pathogenesis of periodontal diseases. Histopathology of gingivitis and periodontitis.
8. Pathogenesis of periodontal diseases. Mechanisms of inflammation and immunity.
9. Classification of periodontal and peri-implant diseases and conditions (2017).
10. Epidemiology of periodontal diseases. Aim, objectives, definitions (rate, prevalence, severity of periodontal diseases).
11. Examination of patients – history, general and local status.
12. Diagnosis of periodontal diseases. Assessment of clinical parameters - probing depth, clinical attachment level, recession, bleeding on probing, mobility, furcation assessment. Determination of disease activity. Instruments for diagnostics in periodontology.
13. Radiographic aids in the diagnosis of periodontal disease.
14. Advanced aids in periodontal diagnosis.
15. Periodontal health on an intact and on a reduced periodontium.
16. Plaque-induced gingivitis. Classification. Clinical features. Clinical findings.
17. Gingivitis, mediated by modifying factors – pharmacological agents. Clinical findings.
18. Gingivitis, mediated by modifying factors – sex steroid hormones. Clinical findings.

19. Gingivitis in autoimmune diseases of skin and mucous membranes. Histopathology and immunopathology. Clinical examination and clinical findings.
20. Necrotizing periodontal diseases. Etiology, histopathology, clinical findings.
21. Periodontitis. Periodontal pocket – classification, histopathologic and clinical features. Suprabony and infrabony pockets. Bone loss and patterns of bone destruction.
22. Periodontitis – general characteristics. Disease distribution and severity. Clinical and radiographic findings.
23. Periodontitis – staging and grading. Definition of clinical and radiographic findings.
24. Clinical risk assessment. Risk factors, risk determinants, risk indicators, risk predictors. Determination of prognosis.
25. Periodontal manifestation of systemic diseases – endocrine, hematological. Clinical findings.
26. Periodontal manifestation of systemic diseases –genetic, and immunologic disorders. Clinical findings.
27. Acute gingival infections – abscesses, pericoronitis. Clinical features, complications, treatment.
28. Endo-periodontal lesions. Classifications. Clinical and radiographic findings. Differential diagnosis. Management.
29. Trauma from occlusion. Types. Stages of tissue response. Clinical and radiographic signs.
30. Peri-implant diseases and conditions. Peri-implant health. Peri-implant mucositis – etiology, clinical findings, diagnostics, and treatment.
31. Periimplantitis. Etiology, clinical and radiographic findings, treatment protocols.
32. Treatment plan. Sequence of therapeutic phases and procedures.
33. Treatment plan of periodontitis according to the stage and grade (schema).
34. Initial periodontal therapy – rationale, treatment sessions, sequence of procedures.
35. Mechanical plaque control for the periodontal patient – devices, methods, recommendations.
36. Chemical plaque control – rationale, indications, and contraindications. Chemical plaque control agents – mechanism of action.
37. Periodontal instruments – sickle scalers, curettes and files. Instrument design. General principles of instrumentation of anterior and posterior sextants.

38. Power – driven devices. Classification, general characteristics, advantages, limitations. Techniques for ultrasonic debridement.
39. Systemic anti-infective therapy for periodontal diseases. Rationale, types of antibiotics, indications and contraindications, clinical use.
40. Locally delivered antimicrobials. Rationale, types of agents, mechanisms of action, clinical use.
41. Corrective phase of periodontal therapy. Goals. Prosthetic, orthodontic and surgical treatment. Splinting.
42. Periodontal surgery. Main objectives. Indications and contraindications. Types of techniques. Approaches to specific pocket problems.
43. Periodontal surgery. Periodontal flap. Classification. Flap design. Incisions. Suturing.
44. Gingival surgical techniques. Curettage. Excisional new attachment procedure. Healing process. Gingivectomy and gingivoplasty. Indications and contraindications. Techniques. Healing process.
45. Flap techniques for pocket therapy. Modified Widman flap.
46. Resective osseous surgery – ostectomy and osteoplasty. Indications and contraindications. Techniques. Basic rules of osseous surgery.
47. Reconstructive periodontal surgery. Indications and contraindications. Possible outcomes, healing process and evaluation of results. Reconstructive techniques – major types. Graft materials. Guided tissue regeneration.
48. Biologic mediators and growth factors used for periodontal regeneration.
49. Furcation involvement. Diagnosis, classification, and indices. Treatment of furcation defects.
50. Mucogingival surgery. Objectives. Classification of mucogingival deformities and conditions. Major treatment approaches.
51. Gingival recession. Predisposing factors. Classifications. Clinical findings. Basic surgical techniques.
52. Supportive periodontal treatment. Objectives and goals of maintenance phase. Examination and treatment procedures at recall visits.
53. Aphthous-ulcerative diseases of the oral mucosa.
54. Oral mucosa ulcers.
55. Vesiculo-ulcerative lesions with viral etiology affecting oral mucosa. Other oral lesions with viral origin.
56. Bullous-ulcerative diseases of the oral mucosa.
57. Oral lichen planus.
58. Oral candidiasis.
59. Symptomatic stomatitis due to systemic diseases.

60. HIV and AIDS.
61. Lips disorders.
62. Tongue disorders.

Recommended literature

1. Lecture course
2. Carranza's clinical periodontology. Edition 11, 12, 13. Newman, Takei, Klokkevold, Carranza.

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