



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### Periodontology

2122-5-H4102D036-H4102D151M

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#### Aims

Prepare the student to diagnose and treat the most common clinical problems associated with periodontal disease, and its correlations with other dental branches and the most important systemic and metabolic diseases.

#### Contents

The course aims to lead the student to the knowledge of the anatomical aspects of the periodontium, of the correlated pathophysiology, of the diagnostic and therapeutic aspects able to adequately diagnose and treat all the pathologies of the periodontium, in its purely medical and surgical aspects.

Particular importance is given to the correlation of periodontal disease with the main systemic diseases related to it. Remarkable emphasis is given to the most modern therapeutic procedures that use advanced technologies, in order to reduce the invalidity of therapeutic protocols.

The student will understand the importance of laser-assisted techniques in the treatment of periodontal disease.

#### Detailed program

Functional anatomy of periodontium, oral cavity and stomatognathic apparatus. Biological aspects of the periodontium and the oral cavity. Definition of the classification. Overview of periodontal disease Epidemiology: diagnostic periodontal indexes and treatment needs, prevalence (age, social status, etc.), risk factors for periodontal disease, periodontal disease as a risk factor for other diseases. Analysis of local etiological factors (dental plaque and tartar): formation, structure and localization of the mucobacterial plaque, mineralization, composition and structure of tartar, conditions favoring the accumulation of local etiological factors. Periodontal disease microbiology: periodontal infections and their peculiarities, determination of pathogenic species in the various forms of periodontal disease, acute manifestations, gingivitis, periodontitis. Pathogenesis: host defense processes, nonspecific immune response (PMN, macrophages, inflammation), specific immune response (humoral and cellular lymphocyte), histopathology of the lesion, initial, early, stabilized, advanced lesion. Host susceptibility: individual response, risk factors. Periodontal disease clinic: gingivitis, gingival volume increases, clinical

manifestations of periodontitis (pockets, gingival recessions, injuries of furcations, mobility, migrations, abscesses), early and aggressive onset periodontitis, chronic periodontitis, necrotizing periodontitis, periodontitis during systemic diseases. Relationship between periodontal disease and systemic disease. Basic and advanced periodontal diagnosis: medical history, clinical examination, survey, Rx examination, immunological and biochemical laboratory tests, microbiological tests, genetic tests. Periodontal therapy: principles and purposes. Preliminary treatment plan. Aetiological periodontal therapy: Antiseptics in periodontal therapy, Chemical control of supragingival plaque, Evaluation of agents and chemical products, Clinical use of chlorhexidine, Objectives of etiologic therapy. Etiological therapy toolkit Patient information and oral hygiene techniques. Scaling Root planing. Laser-assisted approach to periodontal therapy. Elimination of factors favoring plaque accumulation. Elimination and control of systemic diseases and risk factors. Chemical control of subgingival plaque. Antibiotics in periodontal therapy. Reevaluation after etiologic therapy and definitive treatment plan. Overview of periodontal surgery: Principles of periodontal surgery. Healing of the periodontal wound. Periodontal surgical instruments. Suture materials and methods. Guidelines for periodontal surgery. Objectives of surgical treatment. Indications and contraindications of periodontal surgery. Anesthesia. Postoperative monitoring. Surgical therapy: the access flap. Resective Surgical Therapy. Mucogingival Surgical Therapy: Classification of recessions, indications for the increase of adherent gingiva and for the root covering, surgical techniques of adherent gingiva augmentation, surgical techniques of root covering. Regenerative surgical therapy: biological principles of regeneration, membranes and growth factors, guided tissue regeneration (GTR), induced tissue regeneration (ITR). Support periodontal therapy: Maintenance of medium and long term results, Motivation and periodic motivation reinforcement, Patient compliance. Etiology, pathogenesis, clinical manifestations and treatment of peri-implant diseases (mucositis and peri-implantitis). Maintenance and prognosis in the medium and long term of osseointegrated implants. Role of the laser in implantology.

## **Prerequisites**

Completion of the examination in General Dentistry Disciplines

## **Teaching form**

Frontal lessons

## **Textbook and teaching resource**

Parodontologia Clinica e Implantologia Orale. Lindhe. Edi-Ermes

## **Semester**

First semester fifth year

## **Assessment method**

An oral examination is employed to test students' knowledge.

## **Office hours**

Friday, 8,30-9,00

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