

COURSE SYLLABUS

Gnatologia

1819-5-H4601D024-H4601D068M

Aims

Know the gnathology or the functional anatomy of the stomatognathic apparatus during its functions: swallowing, chewing, speaking and breathing.

Another topic of this course is study the analysis of the relationships between body posture and dental occlusion.

Moreover the student has to know the dysfunctional pathologies of this apparatus: clinical aspects, causes and evolution. The student has to know the different therapies of these pathologies to recreate a good and harmonic function of the system.

Contents

Gnathology is the study of the masticatory function and the whole stomatognathic apparatus, analyzing the structures by a functional point of view.

Detailed program

Cranio-cervico-mandibular anatomy

TMJ anatomy and physiology

Functional anatomy of masticatory muscles

Functional anatomy of the dents-alveolar complex

Cranio-mandibular relationships:

rest position

centric occlusion

protrusion and neuromuscular control

sideshift and neuromuscular control

retruded position

Posselt diagram and gothic arch

The fixed occlusal basics of classical gnathology:

Bennett's Angle, Bennett's Movement and Fisher's Angle

Intercondyle distance

Hinge axis and centric relation

The variable occlusal basics of classical gnathology:

Antero-lateral guidances

The occlusal plane

The Von Spee's and Wilson's curves

The height of the cusps

Overjet and overbite

The Frankfurt and Camper planes

The mandibular movements

The masticatory cycle, the swallowing and the concepts of working and balancing side

The occlusal contacts in centric occlusion and during the movements

Analysis of the occlusal contacts and elevations methods (clinical and instrumental)

The distribution and absorption of occlusal forces

The mandibular repositioning

The dysfunctional pathologies of stomatognathic apparatus (DCCM)

The joint pathologies

The disc dislocation (with or without reduction)

The neuromuscular pathologies

The gnathologic diagnosis

Anamnesis, examination and differential tests
Functional instrumental exams
Instrumental exams (X-rays, NMR, CT)
Prognosis
Gnathologic therapies
Relationships with other dental fields
Articulators
Body posture analysis
Relationship between body posture and stomatognathic apparatus
Headaches and migraines: clinical aspects and classification
Headache of dental and gnathologic origin
The cervical spine and the crano-cervical dysfunctional pathologies
Other postural pathologies related to dental occlusion
Other postural therapies

Prerequisites

Completion of the examination in Human Anatomy, Physiology and Basic Pathology

Teaching form

Lectures with clinical samples. Stages in Gnathology department of Dental Clinic of S. Gerardo Hospital (Monza)

Textbook and teaching resource

Peter Dawson

Functional occlusion. From TMJ to smile design.

Mosby Elsevier

Semester

Second semester 5th year

Assessment method

The oral examination method will be used for the knowledge and skills acquired.

Office hours

By appointment after phone or mailing contacts
