UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Pathological Anatomy and Hystology

2021-2-H4601D007

Aims

Primary objective
Know the main macroscopic and microscopic findings of both oral and oral diseases of systemic diseases with possible involvement of dental patients. Correlate i main macroscopic and microscopic findings of dental and systemic diseases with the different clinical phases of diseases.
Main objectives
• Knowing how to treat a biopsy for histological, ultrastructural and immunohistochemistry;
• To be able to describe macroscopically an organ affected by pathology;
• Stimulate the need for prevention and early diagnosis of oral cancers;
• Understanding a histopathological diagnosis and its clinical relevance;
• Be able to observe a histopathological slide;
• Understanding the main findings of the pathology of the oral cavity;
• Understanding the main histopathological findings of systemic pathology with possible dental patient involvement under supervision

Contents

The course is held in the first semester of the third year. It follows the courses of the basic disciplines, of Medicine and General Surgery and precedes the courses of the professionalizing disciplines.
It treats the main diseases of different organs and systems to correlate pathological findings macroscopic and microscopic with different phases of their clinical presentation. Particular emphasis is given for inflammatory and neoplastic diseases of the oral cavity.
It also deals with the main technical aspects of histopathology and how to use the skills of the pathologist to get answers for the main clinical problems of human pathology either of the oral cavity of both systemic diseases.

Detailed program

General Part
Ways of sampling tissue and cytology samples.

Diagnostic potential of the Pathological anatomy with cytology techniques, optical microscopy, immunohistochemistry, electron microscopy.

Diagnostics with the freezer microtome; potentiality and criteria of use of the procedure.

Fixation mode. Criteria for the correct compilation of one request for histological or cytological diagnosis.

Elementary histopathology techniques.

Preparation of preparations for observations in optical microscopy, immunohistochemistry, electron microscopy.

Principles of management of sensitive data.

Oral cavity: - Abnormalities and alterations of the development of congenital and acquired teeth, -

Infectious Diseases of the oral mucosa, -

Ulcerations and vesiculobullosis diseases, -

odontogenic tumors and not odontogenous, -

Allergic and immunological manifestations, -

Congenital diseases, malformative, inflammatory and metabolic bone and pseudotumoral lesions.

Injury of the oral cavity in blood diseases -

Congenital and acquired maxillary and mandibular cysts of soft tissue

- reactive hyperplasia of connective tissue

- keratosis, white lesions and related alterations -

Pseudotumoral lesions of the oral cavity -

Precancerous cord lesions oral -

Neoplasms of the oral cavity.

Salivary Gland:

- Sialoadenitis,

-Obstructive Diseases,

-Neoplasias benign and malignant,

- salivary gland cysts

Nasal cavity:

- Phlogistic lesions -

Nasal cavity and nasopharynx.

Neck:

Thyroglossal duct cysts

- branchial cyst

- Cystic lymphangioma

Heart and vessels (*): -Pericarditis; - Ischemic heart disease; - Endocarditis; - Myocarditis.
Kidney and urinary tract (*): Kidney (anatomy) - Nephritic syndrome - Nephrotic syndrome Glomerular diseases - Acute renal failure - Renal transplantation
Gastrointestinal (*): Malabsorption, - Celiac Disease - Enteritis: M. of Crohn - Colitis ulcerative, other colitis, -
Liver, biliary tract and pancreas (*): - acute and chronic viral hepatitis- drug and toxic hepatitis- Liver cirrhosis
Nervous system (*): Cerebral hemorrhages - Encephalitis
Hematopoietic system (*): - Myeloproliferative syndromes (outline) - Lymphadenitis - Lymphomas (Hodgkin and non-Hodgkin) - Leukemia (outline) - Myeloma - Histiocytosis
Respiratory (*): Chronic obstructive lung disease - Alveolar and interstitial pneumonia, - Pulmonary tuberculosis.
Endocrine system (*): Imaging of hyper and hypofunction of the cortical and adrenal medulla (hints), Hyperthyroidism and - Hypothyroidism - Parathyroid: Paintings in hyper and hypothion paratiroidea (outline)
Skin (*): Precancerous lesions - Lichen planus, psoriasis
Soft tissues (*): - Soft tissue tumors
Metabolic pathology: Diabetes mellitus, -
Immune diseases: Lupus, - AIDS, -Scleroderma
(*) these topics will be treated during the lessons of Anatomy Pathology, where relevant for the understanding and differential diagnosis of the treated oral pathologies. It is the introduction of diagnostic elements to the teachers of clinical subjects histopathology for these topics, in coordination between the teachers of the subjects.

Prerequisites

Passing of the General Pathology exam

Teaching form

Academic lectures, practical work; cases centered on problems andself learning program. The course is organized into academic lessons,practical work, demonstrations and practical exercises; Observation of histopathological findings of clinical pathological cases centere d o npractical problems; self-learning program - Practical demonstration:Supporting the macroscopic evaluation of the surgical specimens - Practical exercises. - Main methods cytological, histological, im m u no hi stochemical and ultrastructural Fixation and embedding techniques. Exercises under the microscope:microscopic observation by each student of histological are driving through direct projection of virtual slides of illustration of microscope histopathological findings of systemic diseases and pathology of the oral cavity. For some parts of the program is suggested to self-

study and hereare some suggested texts. If the student encounters difficulties cancontact the teacher to overcome these problems. In this regard, theteacher gives the availability for 11 months a year. This method is suggested as a way to develop the student's ability to self learning.

During Covid-19 pandemic teaching will be delivered remotely with occasional physical events.

Textbook and teaching resource

Online PDF

Semester

See schedule

Assessment method

Final examination with multiple questions (50-80 questions) on the whole program. The oral part will delve on the areas shown to be weak from the written test.

During Covid-19 pandemic exams will be done remotely on virtual platforms.

Office hours

Lunchtime