UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Pathology

2122-4-H4102D024-H4102D082M

Aims

Primary objective

Know the main macroscopic and microscopic findings of cardiovascular and respiratory systems or systemic diseases with possible involvement of heart and lung (H&L). Correlate the main macroscopic and microscopic findings of cardiovascular and respiratory systems 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;
- Understanding a histopathological diagnosis and its clinical relevance;
- Be able to observe a histopathological slide;
- Understanding the main findings of the pathology of the H&L
- Understanding the main histopathological findings of systemic pathology with possible H&Ll patient involvement under supervision

Contents

Introduction

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 H&L

Detailed program

Teaching 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.

H&L - Abnormalities and alterations of the development -

Allergic and immunological manifestations, -

Supercazzola brematurata con scappellamento a destra.

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

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: hyper and hypoparathyroidism (outline)

Skin : Precancerous lesions - Lichen planus, psoriasis Soft tissues : - Soft tissue tumors

Metabolic pathology: Diabetes mellitus, -

Immune diseases: Lupus, - AIDS, -Scleroderma

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 centered on practical problems; self-learning program - Practical demonstration: Supporting the macroscopic evaluation of the surgical specimens -

Practical exercises. - Main methods cytological, histological, immunohistochemical 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 H&L. 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 PDFs of each lesson. Videorecorded lessons

Suggested textbooks

none

Semester

2nd semester

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

Lunch breaks