UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Us Scan As An Extension of The Clinical Examination: Theoretical-Practical Course

2526-3-H4102D113

Aims

The main objective of the course is to deepen the ultrasound method in its first-level clinical use, as an aid to semeiotics.
Secondary Objectives:

- learn the physical principles of ultrasound imaging and color Doppler
- acquire notions related to advanced ultrasound techniques such as elastosonography, the Controlled Attenuation Parameter for the analysis of steatosis and CEUS
- learn how to set up a standard ultrasound exam

Contents

- physical principles of ultrasound and ultrasound-based techniques
- physical principles of color Doppler with main pitfalls and artifacts
- general protocol for abdominal ultrasound and advanced techniques
- practice on students and patients in the radiology clinics and gastroenterology ward

Detailed program

Lesson 1 (10/3 14-16):

- Physical principles of ultrasound and color Doppler (1 hour)

- Practice (1 hour, portable device in the classroom)
  Lesson 2 (17/3 14-18):
- physical principles of advanced techniques (SWE, CAP and CEUS)
- practice (3 hours, radiology clinics)
  Lesson 3 (24/3 14-18)
- practical (4 hours, radiology clinics and gastroenterology department)

Prerequisites

Deep knowledge of anatomy and semeiotics.
General knowledge of abdominal diseases with focus on liver pathology.

Teaching form

Frontal lessons with ppt presentations.
Practical activity on students and patients

Textbook and teaching resource

Powerpoint slides
Review articles available on RadioGraphics (https://pubs.rsna.org/journal/radiographics)

Semester

second semester, March 10 - 17 - 24

Assessment method

interaction and active participation during lessons and practical activities

Office hours

always available upon contact at the email paolo.marra@unimib.it

Sustainable Development Goals