UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

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

2627-3-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 (2 hours):

- Physical principles of ultrasound, color Doppler, and advanced techniques (SWE, CAP, and CEUS) (1 hour)

- Practice (1 hour, portable device in the classroom, selection of probe, protocol, and parameters)
  Lesson 2 (4 hours):
- Observation (radiology outpatient clinics; 2 hours with outpatients)
- Practice (radiology outpatient clinics; 2 hours in pairs/groups for self-training)
  Lesson 3 (4 hours):
- Observation (radiology outpatient clinics; 2 hours with outpatients)
- Practice (radiology outpatient clinics; 2 hours in pairs/groups for self-training)

Prerequisites

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 (self-training) and patients

Textbook and teaching resource

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

Semester

second semester (March)

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

QUALITY EDUCATION | DECENT WORK AND ECONOMIC GROWTH