UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Diagnostics

2324-6-H4102D039-H4102D169M

Aims

- Provide general guidelines for proper using several imaging modalities in the field of gynecology, obstetrics, and pediatric diseases.
- Assess the diagnostic role of ultrasound, computed tomography, magnetic resonance, alongside interventional techniques in major clinical settings.
- Illustrate and discuss clinical examples where the role of imaging modalities proved to be decisive in order to stage the disease, and assess treatment

Contents

The course will provide students with basic concepts about the technical features of the most important imaging modalities, and their proper use in different clinical settings. The extensive use of ultrasound in gynecology, the role of computed tomography in pediatrics, and the widespread importance of magnetic resonance will be clarified. The definition of imaging modality of choice will be discussed in the context of major clinical settings in gynecology and pediatrics.

Detailed program

- Ultrasound in benign and malignant uterine tumors. Diagnosis, staging, assessment of disease.
- Magnetic resonance as a fundamental tool for the evaluation of uterine neoplasms. Staging criteria by means of new sequences in MR, and their correlation with treatment planning. The role of magnetic resonance in the follow up of patients with uterine cancers.
- Imaging modalities and ovarian cancer. Their rationale in the management of the disease.
- Magnetic resonance and PET/CT as integrated techniques of utmost importance in the evaluation of the

ovarian neoplastic disease after treatment.
- Imaging modalities in pediatrics. Ultrasound as the basic approach to pediatric patient.
- The role of CT in pediatric disease, and the new diagnostic protocols employing low dose devices which allow more extensive use of CT.
- Magnetic resonance imaging, and its usefulness in several clinical settings, namely in oncoematogy.

Prerequisites

Fundamentals of the physiology and pathology, anatomy.

Teaching form

Frontal lectures
Problem based learning
Simulation activities

Textbook and teaching resource

Grainger and Allison. Diagnostic Radiology. Churchill Livingstone/ Elsevier

Semester

First

Assessment method

Oral exam conducted in approximately 20-30 minutes. The exam is positively evaluated with a score of 18/30 or higher. Oral discussion with possible deepening of one or more topics. The questions proposed will be constructed in such a way to induce the student to understand the clinical use and significance of any of the most relevant imaging modalities

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING