UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Scintigraphy Techniques and Tracers

2425-3-I0303D036-I0303D085M

Aims

The student will learn which specific radiopharmaceuticals are used in conventional nuclear medicine investigations, the scintigraphic image acquisition techniques (planar, static, dynamic, whole body, SPECT and SPECT/CT, gated), the diagnostic methods and the related acquisition of scintigraphic investigations, the general principles of image processing. The student will know the basic notions of the organizational/management aspects of a Nuclear Medicine department, the quality control procedures for radiopharmaceuticals and equipment (gamma cameras).

Contents

Organizational aspects of a nuclear medicine department;
daily quality checks on equipment and radiopharmaceuticals;
radiopharmaceutical and autologous cell labeling procedures;
methods of administration of radiopharmaceuticals;
acquisition techniques and methodological protocols of scintigraphic investigations.

Detailed program

Organizational aspects of a nuclear medicine operational unit, management of equipment and radiopharmaceuticals, preventive quality controls for the use of radiopharmaceuticals and equipment, structure and management of the hot room laboratory, marking and disposal procedures for radiopharmaceuticals , methods of administration of radiopharmaceuticals, acquisition protocols for scintigraphic investigations, acquisition techniques (planar, SPECT, SPECT/CT), evaluation of the adequacy of scintigraphic images, nuclear medical image processing, image interpretation criteria (pathological findings, physiological findings and artifacts).

Prerequisites

Teaching form

Lessons will be held in mixed mode in attendance:
? 8 hours of frontal lessons
? 4 hours of interactive lessons (small group work, presentations and discussion)

Textbook and teaching resource

Teaching material provided by the Teacher, AIMN and EANM guidelines, book:Fondamenti di Medicina Nucleare - Tecniche e Applicazioni. of Volterrani - Erba- Mariani.

Semester

First semester

Assessment method

5 multiple choice questions and oral exam

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION