UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Clinical Biochemistry and Molecular Biology

2122-1-H4601D004-H4601D015M

Aims

CLINICAL BIOCHEMISTRY AND CLINICAL MOLECULAR BIOLOGY

Students' skills:

- to describe the role, the limitations and the aims of BC tests;
- to illustrate the causes of biological, analytical and post-analytical variability;
- to illustrate the meaning of quality control in BC;
- to describe the concept of analytical goal, reference intervals, desirable, decisional levels, sensibility, specificity and predictive value of BC tests;
- to illustrate the concept of function and lesion marker applied to hepatic and cardiac diagnostics;
- to describe the main lab tests used in the assessment of glucidic metabolism, plasmatic protein alterations, coagulopathies, hemoglobinopathies, dyslipidemias, and bone diseases.
- To describe the use of tumor markers.

Contents

CLINICAL BIOCHEMISTRY AND CLINICAL MOLECULAR BIOLOGY

To provide the students with the basic knowledge about clinical biochemistry tests to be used in the main organ/tissue alteration relevant for the dentists.

Detailed program

CLINICAL BIOCHEMISTRY AND CLINICAL MOLECULAR BIOLOGY

Role, limitations and the aims of BC tests; Biological, analytical and post-analytical variability; Analytical goals, and control quality in BC How to interpret lab results: reference intervals, desirable, decisional levels, sensibility, specificity and predictive value of BC tests; Clinical biochemical assessment of glucidic metabolism, plasmatic protein alterations, coagulopathies, hemoglobinopathies, Function and lesion markers in the hepatic and cardiac diagnostics; dyslipidemias, and bone diseases. Use of biochemical tumor markers.

Prerequisites

Aims of Preparatory Sciences course.

Teaching form

Lectures and practices.

Textbook and teaching resource

CLINICAL BIOCHEMISTRY AND CLINICAL MOLECULAR BIOLOGY BOOKS:

Federici Giorgio: Medicina di laboratorio. Publishing house: McGraw-Hill

Semester

First year of course, second semester.

Assessment method

Written tests: 27 single /multiple-choice quizzes divided between the three different modules and final interview.

Office hours

Reception upon appointment.