UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Emergency

2526-4-H4102D024-H4102D087M

Aims

Provide concepts necessary for understanding pathophysiology, clinical presentation and treatment of the most frequent cardio - respiratory emergencies.

The course will focus on pathophysiology, clinical symptoms and signs of principal cardio -respiratory emergencies and principles of pharmacological and mechanical treatments. There are 10 hours of frontal lessons with a modality of delivery teaching.

Contents

The course will explain the most important clinical aspects and relative treatments of the following cardiac and respiratory emergencies:

1. Cardiocirculatory arrest
2. Cardiogenic Shock
3. Cardiac Tamponade
4. Acute Aortic Dissection
5. Pulmonary Embolism
6. Acute Respiratory Insufficiency and ARDS

Detailed program

1. Causes of Cardiocirculatory arrest and treatment: Basic Life Support and Defibrillation (BLS-D), Advanced Cardiac Life Support principles (ACLS). Extracorporeal Life Support principles (ECLS);

2. Definition and classification of Shocks' types and focus on Cardiogenic Shock, pathophysiology, clinical presentation and treatment;

3. Obstructive shock: focus on the causes of Cardiac Tamponade, pathophysiology, clinical presentation and treatment;

4. Causes of Aortic dissection, classification, clinical presentation and medical treatment prior to surgery;

5. Causes of Pulmonary Embolism, acute cor pulmonale, pathophysiology, clinical presentation and treatment;

6. Causes of Acute Respiratory Insufficiency and ARDS clinical presentation and principles of treatment

Prerequisites

Basic knowledge of biology, biochemistry, cardiac, vascular and respiratory anatomy, cardiac and respiratory physiology and pathophysiology.

Teaching form

Frontal lessons in presence (10 hours - 5 Lessons of 2 hours), with a theoretical and practical approach to the most frequent cardiorespiratory emergencies fronted in the program. Delivery teaching form.

Textbook and teaching resource

Lessons' Powerpoint

Textbook:

- Harrison's Principle of Internal Medicine
- Braunwald's Heart Disease
- Marino The ICU Book
- Reviews and Articles on principal topics from Pubmed

Semester

First semester 4th year

Assessment method

The Students' Assessment is divided in two parts.

A first part is composed of a written exam on the platform esamionline elearning: 50 questions with 4 multiple-choice for each and only one correct. The questions are inherent to all specialities of cardiovascular and respiratory track. Sufficiency for the access to Oral part: 30/50.

A second part: Oral, with discussion of clinical cases on topics of the vertical track. Through the discussion of the clinical case, both the problem solving skills and the theoretical knowledge of the student will be examined.

For the Oral part, The examination commission is composed with a rotation of all Physicians and Professors involved in the Vertical Track.

There are no internal tests for this course.

Office hours

on appointment by email

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY