UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Blood Diseases B

2021-3-H4101D260-H4101D064M

Aims

HAEMATOLOGY

Etiology, anatomical and clinical characteristics of the main hematological (anemia, leukemia, myeloproliferative syndromes, coagulopathy). Interpretation of clinical signs and laboratory information for diagnosis; Including NGS techniques. Main therapeutic programs in hematology based on evidence.

Contents

To use the knowledge of Anatomy, Physiology, Biochemistry and others basic disciplines in dealing with organ and/or apparatus pathologies.

To be able to critically evaluate the commonly used diagnostic methods in medical practice.

To recognize the signs and symptoms of major diseases, to understand the results of laboratory and instrumental tests.

To know the pathogenesis and prognosis of the handled diseases.

Detailed program

BLOOD DISEASES

History and Examination in Hematology – Laboratory Examinations in Hematology (Hemocromocytometric Examination, Leukocyte Formula, Including Next Generation Sequencing Techniques Stem and progenitor cells of hematopoietic cells - the bone marrow - Classification and general clinical aspects of anemia – Anemia megaloblastic - anemia hypochromic, microcytic - deficiency anemia - anemia normochromic, normocitiche - Classification of hemolytic anemias - hereditary spherocytosis (general outline, to be completed in the Pediatrics course) - Emolytic enzymopathic anemia Emoglobinopathies and Thalassemies (general outline, to be completed in the Pediatrics course) - Anemia immunoemolitiche - Anemia from fragmentation of red blood cells - blood groups - Transfusions of red blood cells and related complications - Classification of disorders of stem cell - Aplastic anemia, myelodysplasia - Acute myelogenous leukemia – Acute Lymphoblastic Leukemia - Chronic myeloid leukemia - Chronic lymphocytic leukemia - Polycythemia Vera - Myelofibrosis - idiopathic thrombocythemia - lymphoma non-Hodgkin - Hodgkin's lymphoma - myeloma and monoclonal gammopathy - pathophysiological mechanisms of coagulation and laboratory diagnostic methods - clinical signs of bleeding and thrombotic disorders - Thrombocytopenia and platelet - congenital coagulopathy: hemophiliac - Coagulopathies acquired - platelet transfusions - Oncemopathic Therapy Elements - Autologous and Allogene Peripheral Stem Cell Stem Cell Transplantation.

Knowledge of the basis for statistical analysis and data presentation in clinical research.

Knowledge of the psychological basis to approach the hematological patient.

Prerequisites

See "Patologia medico-chirurgica 3"

Teaching form

Frontal lessons with audio-visual aids and open discussion in the classroom, practice in smaller groups in outpatient clinics, wards and operating rooms.

During the Covid-19 emergency period, lessons will take place in a mixed mode:partial presence and asynchronous/synchronous videotaped lessons.

Textbook and teaching resource

- Giuliani, Olivieri. *Ematologia; 2020*; Editore Idelson Gnocchi.

- DeVita, Hellman, and Rosenberg's. *Cancer: Principles & Practice of Oncology*, 11th Edition, 2018, Wolters & Kluwer.

- Howard Brody. *HOOKED: Ethics, the Medical Profession, and the Pharmaceutical Industry*; Editore: Rowman &

Littlefield Publishers, Inc.; Anno edizione: 2006; ISBN-10: 0742552187; ISBN-13: 978-0742552180.

- Carlo Gambacorti-Passerini, Stefania Luciani; *Tu sarai la prima. Una corsa contro il tempo, una nuova terapia, un incontro eccezionale*; Editore: Ledizioni; Anno edizione: 2019; ISBN cartaceo: 9788867059263; ISBN ePub: 9788867059706.

- Carolina Mercurio, Valeria Nardilli. *Vita e sVita "...all'ultimo passo, la salvezza";* Libellula Edizioni. (copy present in "Malattie del Sangue A" section for the exclusive use of students of the PMC3 course)

Semester

second semester

Assessment method

The assessment of achieved objectives will be verified with written tests and oral exam. 33 single-answer questions with 4 answers of which only one exact (30 points) and oral exam (30 points).

The student who refuses a score >20 cannot participate in the next exam session.

During Covid-19 emergency period, oral exams will be telematic only.

Office hours

Contact the Professor by e-mail