



UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Patologia Medico-Chirurgica 3

1718-3-H4101D260

Aims

RHEUMATOLOGY: Elements of Semiotics (joint physical examination, laboratory tests, imaging); Epidemiology of rheumatic diseases, systemic connective- spondyloarthritis -vasculitis: etiology / pathogenesis, diagnostic criteria, laboratory and instrumental investigations, clinical picture, elements of therapy. 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. INFECTIOUS DISEASES: Etiology of major infectious diseases (bacterial, viral, fungal) and related clinical and laboratory typical signs for diagnosis and therapy. UROLOGY Major urological syndromes, urogenital infections, Urinary, Oncology, Urology, Andrology Pathology, Laboratory Medicine. NEPHROLOGY: Pathophysiological and diagnostic significance of renal function

parameters. Acute kidney injury. Primary and secondary glomerular diseases. Chronic kidney disease. Systemic complications of end stage renal disease. Inherited renal disorders.

Contents

Students will learn to apply their knowledge of Anatomy, Physiology, Biochemistry, to organ and/or apparatus pathologies. They will also learn how to evaluate the diagnostic methods, generally used in medical practice, to recognize signs and symptoms of the main diseases, and interpret the results of instrumental and laboratory analysis.

Detailed program

NEPHROLOGY The pathophysiological and diagnostic significance of renal function parameters: filtration, glomerular function. Tubular Acute Renal Insufficiency - Identification of Patients at Risk and Evaluation of Suspected Clinical Elements - Diagnosis: Evaluation of Creatinine - Guidance on causes and pathogenetic mechanisms (classification) - Patient's biological monitoring - Prognosis and prevention Chronic renal failure - Renal disease progression mechanisms - Renal disease progression factors with correctional findings - Patient's biological monitoring - Progression prevention - Short and long-term complications - Management of the disease Uremic patient Nephrosis syndrome - Definition - Suspicion elements - Diagnosis - Causes (Glomerulopathy) - Prognosis - Primitive and secondary glomerulopathies - Suspicion elements - Diagnosis - Etiopathogenesis and cause detection - Prevention

of complications - Forecasts Renovascular hypertension - Renal hypertension: Pathogenetic aspects - Suspicion of vascular high blood pressure - Diagnostic procedure - Evaluation of therapeutic solutions - Patient monitoring The kidney in phosphocalcal metabolism, in the hydroelectrolyte replacement and in the acid-base balance - Acidosis and alkalis me Tablets - Iponatremia - Hypokalaemia and hyperkalemia - Plasma osmotic disorders - Calcium-phosphorus metabolism - Actual circulating volume Isolated urinary abnormalities - Urinary albumin excretion - Micro and macroematuria - Urinary sediment assessment - Acidity and specific weight assessment - Conta Addis Cystic kidney disease - Prognosis - Diagnostic screening - Prevention of complications - Patient monitoring Urinary tract infections and reflux pathology 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
disorders - Thrombocytopenia and platelet - congenital coagulopathy:
hemophiliac - Coagulopathies acquired - platelet transfusions -
Oncemopathic Therapy Elements - Autologous and Allogene Peripheral
Stem Cell Stem Cell Transplantation. ° Rheumatology and Immunology
CLINICAL ELEMENTS: EXAM OBJECTIVE ARTICULAR, LABORATORY TESTS,
IMAGING ELEMENTS EPIDEMIOLOGY DISEASE RHEUMATIC Connective

SYSTEMIC - Systemic Lupus Erythematosus - Systemic Sclerosis -
Rheumatoid Arthritis - Dermatomyositis-polymyositis - Connetiviti
undifferentiated and overlapping syndromes - Syndrome Sjogren tHE
spondyloarthritis - Ankylosing spondylitis - Psoriatic arthropathy - S.
Reiter and reactive Arthritis - Arthritis enteropathic - young and
undifferentiated spondyloarthritis vasculitis SYSTEMIC - vasculitis giant
cell (Horton's disease and Takayasu's disease) - Bechet's disease -
Polyarteritis nodosa - micropolyangiitis - Churg-Strauss granulomatous -
Hypersensitivity vasculitis - Henoch-Schonlein syndrome - Mixed
coglobulinemia ARTROPATIES FROM CRYSTALS ARTHRITIC ARTHRITIS
ARTROYS OSTEOPOROSIS - INFECTIVE DISEASES 2 HIV infection History
Epidemiology Vital Vitality of HIV S tory natural infection
Immunopathogenesis Main opportunistic events, divided by devices
Diagnosis of acute and chronic infection Urinary tract infections and
sexually transmitted diseases cystitis pyelonephritis Syphilis Gonorrhea
and Chlamydia pelvic inflammatory disease (PID) Trichomonas
Gardrenella lymphogranuloma venereum Diseases of reticulo- endothelial
system Mononucleosis and CMV Brucellosis Visceral Leishmaniasis Lyme

Diseases Toxoplasmosis Rickettsiosis Fever Q Immune; Infections in immunocompromised patients. Infections in the patient with solid organ transplantation Infections in the patient with bone marrow transplantation Infections in the patient with neoplasia Splenectomized patient infections Infections in the diabetic patient Infections in the alcoholic patient Infections in the patient using injecting drugs

Cardiovascular system infections Endocarditis Infectious or Aetiology or Clinical Events and Complications or Diagnosis (Duke's Criteria) Myocarditis and Infectious Pericardies or Clinical Events and Complications or Principles of Diagnosis ° UROLOGY Specific Goals:

Anatomy and Physiology of Urinary And Male Genital Apparatus. Inflammatory, infectious and metabolic pathology of male urinary system and male genitalia. Oncology pathology of male urinary system and male genitalia. Malignant degenerative and malformative pathology of male urinary system and genitalia Clinical and instrumental diagnostics of male urinary system and male genitalia. Topics: Clinical and instrumental semeiotics of male urinary system and male genital Anatomy of kidney and ureter, physiology of renal function - Renal and urethral calculus - Urosepsis - Pielonephritis - Urinary TBC - Benign and malignant kidney tumors - Urethral tumor neoplasms of the basin And ureter - Joint stenosis, horn kidney Anatomy of the bladder and physiology of bladder emptying - Cystitis - Bladder bleeding, bladder bleeding - Bladder bleeding disorders and incontinence - Bladder-urethral reflux - Surface and infiltrating vesicular tumors Prostatic anatomy and physiology - Prostatic hypertrophy - Acute prostatitis - Prostatic neoplasia Anatomy of the urethra - Urethra - Stenosis - Hypospadias and epispadias - Valves and diverticula Scrotum anatomy and physiology of the gonad function - Orchitis epididymitis - Twist of the rope - Infertility and varicocele -

Idrocele - benign and malignant testicular tumors Penile natoma and erection physiology - Erectile Deficiency - Recurvatum penis - Induratio plastic penis.

Prerequisites

Teaching form

Classes and practical training in outpatient/inpatient clinics, and in operating rooms

Textbook and teaching resource

Harrison's Principles of Internal Medicine Ed. McGraw Hill 19th edition;
Cecil Textbook of Medicine, 25th Edition, 2016. - Rugarli Medicina Interna sistematica Ed. Elsevier Masson 6° edizione - Johnson RJ, Feehally J, Floege J, Comprehensive Clinical Nephrology Fifth edition - Manuale di malattie infettive. Mauro Moroni, Spinello Antinori, Vincenzo Vullo 2014 Edizione Masson 8^ edizione - Corradini – Foa'- Boccadoro Manuale di Ematologia 2014 Editore Minerva Medica - DeVita, Hellman, and Rosenberg's Cancer: Principles & Practice of Oncology, 11th Edition, 2018, Wolters & Kluwer

Semester

Assessment method

Multiple choice questions and colloquium

Office hours
