UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Infectious Diseases 1

2627-3-H4101D260-H4101D184M

Aims

INFECTIOUS DISEASES:

Etiology of major infectious diseases (bacterial, viral, fungal) and related clinical and laboratory typical signs for diagnosis and therapy.
Analysing and evaluating the onset and symptoms of infectious diseases, highlighting how for the same disease, different problems may occur in men and women.

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

INFECTIVE DISEASES

- Nervous system infections

  - Meningitis (Etiology, Pathogenesis, Clinical manifestations, Diagnosis, Differential Diagnosis, N. meningititidis, S. pneumoniae, H. influenzae, L. monocytogenes)
  - Encephalitis and encephalo-myelitis (Etiology, pathogenesis, clinical manifestations, diagnosis, herpes viruses, enterovirus, Tuscany Virus, West Nile Virus, Tick borne encephalitis virus
  - Rabies
  - Nevrassites mediated by bacterial toxins (tetanus, botulinum)
  - Brain abscess and subdural empyema

- Respiratory system infections

  - Diphtheria
  - pharyngitis / tonsillitis
  - Epiglottitis / laryngitis / tracheitis
  - Bronchitis
  - Viral pneumonia
  - Bacterial pneumonia
  - Flu
  - Tuberculosis
  - COVID-19

- Infections of the cardiovascular system

  - Infective endocarditis (Etiology, clinical manifestations and complications, diagnosis)
  - Myocarditis and infectious pericarditis (clinical manifestations and complications, principles of diagnosis)

- Infections of the digestive system

  - Etiological and pathophysiological classification
  - Typhoid fever
  - Food poisoning (staphylococcal, botulism, C. perfrigens, V. parahaemoliticus, B. cereus)
  - Viral gastroenteritis (Norwalk, Rotavirus, other viruses involved)
  - Bacterial gastroenteritis (minor salmonellosis, cholera, E.coli, Shigella, Campylobacter, Listeria, C. difficile)
  - Diarrhea due to protozoa (giardiasis, amoebiasis, cryptosporidiosis)
  - Diarrhea due to helminths (tapeworm, oxyuriasis, ascaridiasis)

- Tropical diseases

  - Malaria (Epidemiology, life cycle, pathogenesis, typical and atypical presentation, complications and prognosis, diagnosis, differential diagnosis between plasmodia)
  - Schistosomiasis (Lifecycle, Clinic: acute form, chronic forms, Diagnosis)
  - Tropical Arbovirosis (Yellow Fever, Dengue, Chikungunya, West Nile Virus)

- Infections of the tegumentary system and skeletal muscle:

  - Cellulitis
  - Erysipelas
  - Gas gangrene
  - Necrotizing fasciitis
  - Primitive and prosthetic septic arthritis
  - Primitive and prosthetic osteomyelitis
  - Spondylodiscitis

- HIV infection

- History
- Epidemiology
- HIV Replication cycle
- Natural history of infection
- Immunopathogenesis
- Main opportunisms, by apparatus
- Diagnosis of acute and chronic infection

- sexually transmitted infections

- Syphilis
- Gonorrhea
- Non-gonococcal urethritis

- Diseases of the reticuloendothelial system

- Mononucleosis
- CMV
- Brucellosis
- Visceral leishmaniasis
- Lyme disease
- Toxoplasmosis
- Rickettsioses
- Q fever

Prerequisites

See "Patologia medico-chirurgica 3"

Teaching form

Lectures with the use of audiovisual aids and classroom discussion with students

Textbook and teaching resource

Mauro Moroni, Roberto Esposito, Spinello Antinori. *Malattie Infettive*. Edizione Masson 8° edizione, 2014

Semester

second semester

Assessment method

The assessment of achieved objectives will be verified with written tests and oral exam.

Office hours

Contact the Professor by e-mail: paolo.bonfanti@unimib.it; giuseppe.lapadula@unimib.it

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING