



FISIOPATOLOGIA, SEMEIOTICA E METODOLOGIA CLINICA - channel 8

8 CFU - 1° Semester

Teaching Staff

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LEARNING OBJECTIVES

▪ PATHOPHYSIOLOGY, SEMEIOTICS AND MEDICAL METHODOLOGY

Unitary and global vision of symptoms and / or signs through semeiotic methodology. This requires knowledge and evaluation of multiple functional interrelations. Knowledge of the basic elements of the main internist diseases and of the main clinical situations that put life at risk. The topics will be dealt with attention to the approach to the symptomatology of the main diseases through anamnesis, objective examination and laboratory tests defining the elements useful for prevention and for correct lifestyles by maintaining the optimal psychophysical condition.

▪ FISIOPATOLOGIA, SEMEIOTICA E METODOLOGIA CHIRURGICA

The purpose of the course will be to train the student in:

-collect anamnestic information, define symptoms, fill out the clinical scores;

-know and perform the semeiotic of organs and systems drawing on from the main diseases of the surgical pathology;

-know the most important changes in laboratory parameters and instrumental examinations for the study of the major organs and systems of surgical competence;

-interpretare symptoms, clinical signs, laboratory and instrumental findings of the main diseases of surgical pathology in key pathophysiological and start a clinical diagnostic reasoning;

-start to use the principles of surgical semeiotics and pathophysiology in the diagnostic workup of the main surgical diseases.

COURSE STRUCTURE

▪ **PATHOPHYSIOLOGY, SEMEIOTICS AND MEDICAL METHODOLOGY**

Lessons with presentation of clinical cases

DETAILED COURSE CONTENT

▪ **PATHOPHYSIOLOGY, SEMEIOTICS AND MEDICAL METHODOLOGY**

- Familiar, physiological, proximal and remote pathological anamnesis.
- General objective examination: sensory, decubitus, facies, skin characters (complexion, elemental lesions of the skin, piliferous system and nails).
- Skin temperature. Fever (febrile fever, continuous, remitting, intermittent, recurrent, undulating fever). Dermographism, allergy skin reactions. State of visible mucous membranes and of the tongue. Edema from stasis, discrasic, inflammatory, angioneurotic. Collateral circles.
- Superficial lymphoglandular swelling.
- Constitution, conformation of the skeleton.
- Blood count examination. VES, antistreptolysin titre, C reactive protein. Semeiotics of anemias. Semeiotics of leukemia (acute and chronic) and plasmacytoma. Semeiotics of bleeding disorders due to coagulation defects (haemophilic syndromes, prothrombin deficiency and fibrinogen deficiency). Semeiotics of hemorrhagic diseases due to thrombocytopenia (M. Werlhof) and vascular defects (secondary constitutional microvasculopathies). Semeiotics of sarcoidosis, M. of Hodgkin, Lymph and reticulosarcomas. Semeiotics of splenomegaly.
- Chest inspection: topographic division of the thorax. Cough, sputum, hemoptysis, chest pains. Types of breath. Dyspnoea (inspiratory, expiratory, stress, accessional, continuous).
- Chest palpation: expansibility, identification of pain points, FVT and its physiological and pathological variants.
- Chest percussion: technique of comparative delimiting percussion. Projection of pulmonary borders. Delimitation of the pulmonary apices, of the inferior and anterior margins, of Traube. Modification of lung margins and their respiratory displacement. Hyperphonic, tympanic, metallic sound (emphysema, pneumothorax, caverns), hypophonic and obtuse from pulmonary causes (atelectasis, pneumonia, infarction, edema, inflammatory and neoplastic infiltrations, liquid filled cavity, hypophonic or obtuse pleural sound (pleurisy, hydrothorax), hydro-pneumothorax, pleural thickening).
- Chest auscultation: vesicular murmur (strengthening, weakening), bronchial breath (pulmonary thickening, pleural effusions, caverns). Broncho-pulmonary noises (dry and humid, pulmonary crackling), pleural and pleuro-pulmonary noises.
- Non-radiological respiratory functional seismology: respiratory index, spirometry - total lung capacity and its fractions - pleural puncture and examination of pleural fluids.
- Inspection and palpation of the precordial region: drafts, fish, abnormal pulsations, thrills. Hague of relative dullness of the heart and delimitation technique; hepatocardial angle, longitudinal and transverse diameter; enlargements of cardiac atria from hypertrophy and from pericardial effusions.
- Heart auscultation outbreaks. Cardiac tones (I, II, III and IV). Weakening, strengthening and doubling of tones. Endocardial noise. Heart murmurs. Systolic and diastolic noises. Pericardial

rubbing.

- Inspection, palpation and auscultation of the arteries and veins.
- ECG. Atrial, junctional (nodal) and ventricular extrasistolia. Fibrillation and atrial flutter. Paroxysmal tachycardia.
- ECG. A-V blocks, branch blocks. diaphragmatic myocardial infarction (posterior, anterior, anterior-septal, anterolateral).
- Measurement methods for arterial and venous blood pressure.
- Anorexia, bulimia, heartburn, belching, regurgitation, dysphagia, vomiting, hematemesis, diarrhea, melena, constipation, feces.
- Abdomen inspection: topographic division of the abdomen. Abdominal pain. Volume and strength of the abdomen, state of the navel, peristaltic movements, collateral venous circles of the abdominal wall.
- Abdomen palpation: technique, research of the flow, of the ballot; painful points of the abdomen. Liver palpation: margin, surface, consistency and pain. Sign of Courvoisier-Terrier.
- Spleen and pancreas palpation.
- Abdomen percussion: liver, spleen, stomach, abdominal spills
- Abdomen auscultation: gurgle, borborigmi, noises from stenosis, Koenig's syndrome, rubs, esophageal noises.
- Stool examination: macroscopic characters, smell, reaction, occult blood research; microscopic examination: research of food residues (fats, starches, flesh and vegetable fibers), mucus, leukocytes; search for protozoan parasites (amoebas, lambia, tricomonas) and helminth eggs.
- Liver function tests: serum-protein pattern, bilirubinemia and its fractions, alkaline phosphatase, transaminase.
- Kidney palpation: bimanual palpation, search for ballot. Bladder globe.
- Urine analysis
- Bio-humoral parameters: Azotemia, creatininemia. eFGR (Cockroft-Gault formula, CKD-EPI, MDRD).
- Thyroid semeiotic: hyper and hypothyroidism; basal metabolism, thyroid scintigraphy.
- Pituitary insufficiency syndrome (M. of Simmonds, M. of Fröhlich and adipose-genital dystrophy, dwarfism and hypophyseal infantilism).
- Pituitary hyperfunction syndrome (acromegaly and gigantism).
- Insipid diabetes
- Addison's disease, pheochromocytoma, Cushing's syndrome, hypogonadism.
- OGTT , Hyperglycemic and hypoglycaemic coma. Gout.
- Dyslipidemia
- Differential diagnosis of the coma (diabetic, hypoglycemic, uremic, hepatic, cerebral)
- Neurological examination
- Examination of the physiological reflex, pathological pupillary
- Stroke

▪ **FISIOPATOLOGIA, SEMEIOTICA E METODOLOGIA CHIRURGICA**

The program includes the training of the student in the pathophysiology, semeiotic and surgical approach in the following diseases:

- 1) alterations of the abdominal wall
- 2) biliary secretion and jaundice
- 3) pancreatic secretion and acute pancreatitis
- 4) Portal hypertension

- 5) Septic shock
- 6) Physical examination and diagnostic of the breast
- 7) Pathophysiology of esophageal motility
- 8) The neoplastic disease of the digestive system
- 9) Haemorrhagic syndrome of the digestive system
- 10) Physical examination and diagnostic of the thyroid
- 11) Acute abdomen
- 12) Bowel obstruction

TEXTBOOK INFORMATION

- **PATHOPHYSIOLOGY, SEMEIOTICS AND MEDICAL METHODOLOGY**

- Guida all'esame fisico e Semeiotica clinica (Siedel)

- Semeiotica Medica (Rasario)

- **FISIOPATOLOGIA, SEMEIOTICA E METODOLOGIA CHIRURGICA**

- 1) CHIRURGIA di RENZO DIONIGI - Editore: Elsevier

- 2) Manuale di Semeiotica e Metodologia Chirurgica - di Basile - Di Candio - Bellantone - Biondi - Dionigi - Docimo - Lombardi, Editore: Edra - Masson
