UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Patologia Medico-chirurgica 2

1819-3-H4101D258

Aims

GASTROENTEROLOGY: Motor disorders of the esophagus, gastroesophageal reflux disease and its complications, gastritis and
gastropathies, peptic ulcer disease. Maldigestion and malabsorption. Crohn's disease and ulcerative colitis, celiac disease. Jaundice,
cholelitiasis, viral hepatitis, chronic non-viral hepatitis, cirrhosis, portal hypertension. Hepatocellular carcinoma and cholangiocarcinoma.
Constipation, diarrhea, irritable bowel syndrome,diverticular disease. Acute and chronic pancreatitis. ENDOCRINOLOGY: hypothalamic and pituitary disease; thyroid diseases, disorders of calcium and phosphorus metabolism and parathyroid diseases. Adrenal disease. Hypogonadism. Diabetes. Dyslipidemias. Gout. Obesity and underweight. CLINICAL BIOCHEMISTRY : The goal of the course is to provide the students with the tools for the correct use of biochemical tests for the digestive and endocrine system diseases, the elements for the comprehension of their physio-pathologic basis and the definition of their indications and interpretation. SURGERY SEMEIOTIC: Abdominal wall hernia. Esophageal cancer. Diaphragm disease and hiatal hernia. Gastric disease. Colon and rectum disease: megacolon, polyposis, diverticulosis, colon-rectum cancer. Anal disease: rectal prolapse, hemorrhoid, fissures, abscess. Biliary and pancreatic disease: gallbladder stones, cystic and solid tumors of the pancreas. Neuroendocrine tumor: carcinoid, gastrinoma, pancreatic endocrine tumors. Multiple endocrine neoplasia

Contents

The primary goal of the course is to provide students with the pathophysiologic basis to understand the clinical and surgical semeiotics and the physiopathology of the digestive and endocrine system in order to make correlations between the inner mechanisms of diseases and their clinical expression. The student will be able to interpret symptoms, signs and laboratory tests as well as radiologic and endoscopic findings. Clinical tools to understand concepts of organ-limited disease, system involvement or systemic disease will be provide.

Detailed program

GASTROENTEROLOGY MOTOR DISORDER OF THE ESOPHAGUS AND GASTROESOPHAGEAL DISEASE - Achalasia; other hypermotility disorders of the distal esophagus and lower esophagus sphincter; esophageal hypomotility disorders. - Gastroesophageal reflux disease and its complications - Barret's esophagus - Esophageal disorders caused by infection, sysyemic diseases, radiation, trauma and medications - Dyspeptic disease ACID-RELATED DISEASES - Gastritis and gastropathies - Peptic ulcer and complication - Helicobacter Pylori infection - Zollinger- Ellison's syndrome ABDOMINAL PAIN, CONSTIPATION AND DIARREA - Cholelitiasis - Chronic constipation - Acute and chronic diarrhea - Irritable bowel syndrome MALABSORPTION - Maldigestion and malabsorption - Celiac disease UPPER AND LOWER GASTROINTESTINAL BLEEDING - Haematemesis and melena - Haematochezia and lower GI bleeding -Obscure gastrointestinal bleeding INFLAMMATORY BOWEL DISEASES - Ulcerative colitis - Crohn's disease - Indeterminate colitis and microscopic colitis - Diverticular disease ACUTE AND CHRONIC HEPATITIS - viral hepatitis, chronic non-viral hepatitis. - Alcoholic liver disease - Cholesatic liver disease - Metabolic liver disease and steatosis - Drug-induced liver injury CIRRHOSIS AND PORTAL HYPERTENSION - Cirrhosis compensated and decompensated - Portal hypertension - Compplication of cirrhosis: ascites, spontaneous bacterial peritonitis, hepato-renale syndrome, gastroesophageal varices, hepatic encephalopathy - Liver transplantation TUMOR OF THE LIVER - Primary and secondary tumours of the liver - Focal nodular hyperplasia - Benign liver lesions - Malignant liver lesions: hepatocellular carcinoma, cholangiocarcninoma, epatoblastoma, emangioendotelioma ACUTE AND CHRONIC PANCREATITIS - Acute and chronic biliary pancreatitis - Others (alcholic, genetic etc.) - Complications ENDOCRINOLOGY HYPOTHALAMIC AND PITUITARY DISEASES Pituitary Physiology and Diagnostic Evaluation, Pituitary Masses and Tumors: non secreting and secreting (prolactin, GH, TSH, ACTH, FSH/LH), pituitary adenomas, hypopituitarism (panhypopituitarism and selective hormone deficiencies), neuropituitary diseases (diabetes insipidus, Syndrome of Inappropriate Antidiuretic Hormone Secretion) , THYROID DISEASES Hyperthyroidism (Graves-Basedow, Plummer, multinodular goiter), hypothyroidism and thyroiditis, thyroid nodule, thyroid cancer,
DISORDERS OF CALCIUM AND PHOSPHORUS METABOLISM AND PARATHYROID DISEASES Hyperparathyroidism, Hypoparathyroidism, pseudohypoparathyroidism, Paget diseases, Osteoporosis. ADRENAL DISEASES Sindrome di Cushing, Addison's Disease, hyperaldosteronism, pheochromocytoma/paraganglioma and endocrine hypertension.
REPRODUCTION Physiology and Pathology of the Female Reproductive Axis, Hormonal Contraception, Testicular Disorders, Sexual Dysfunction in Men and Women MULTIPLE ENDOCRINE NEOPLASIA MEN1, MEN2A, MEN2B DIABETES AND METABOLIC DISEASES Type 2 Diabetes Mellitus, Type 1 Diabetes Mellitus, Gestational diabetes, Complications of Diabetes Mellitus, hypoglycaemia, control of energy metabolis, obesity, gout, dyslipidemias, Gastrointestinal Hormones CLINICAL BIOCHEMISTRY Liver injury tests: • Patterns of liver injury • Hepatic enzymes, AST ALT GGT ALP • Test for alcoholism • Bilirubin and hyperbilirubinemia • Biochemical test for hepatic fibrosis Laboratory diagnosis of celiac disease. • Indications and interpretation Biochemical markers of osteoporosis. •
Indications and interpretation Laboratory test for thyroid dysfunctions diagnosis and monitoring • Indications and interpretation Laboratory test for diabetes mellitus diagnosis and monitoring • A1c - diabetes diagnosis and evaluation • Plasmatic and urinary glucose - laboratory vs POCT Microalbuminuria - complication prevision. Autoantibody assays and genetic tests - indications and interpretation Hemocromocytometric analysis • Indications and interpretation Laboratory evaluation of inflammatory state. Indications and interpretation SEMEIOTICS AND SYSTEMATIC SURGERY ABDOMINAL WALL HERNIA • inguinal hernia, crural hernia, umbilical hernia, epigastric hernia ESOPHAGEAL DISEASE • Esophageal cancer DIAFRAGM DISEASES • hiatal hernia GASTRIC DISEASES • Gastric cancer COLORECTAL DISEASES • megacolon, polyposis • diverticulosis • colon-rectum cancer • appendicitis ANAL
DISEASES • anal disease: rectal prolapse, hemorrhoid, fissures, • abscess. BILIARY TRACT DISEASE • gallbladder stones PANCREAS DISEASE • pancreatic cancer • pseudocysts • intraductal papillary mucinous neoplasms NEUROENDOCRINE DISEASE • carcinoids, gastrinoma • alfa and beta cells tumours • multiple endocrine neuroendocrine tumour.

Prerequisites

Propaedeutic skills.

Teaching form

Lectures and exercises.

Textbook and teaching resource

GASTROENTEROLOGIA

Manuale di Gastroenterologia UNIGASTRO Nuova Edizione Coordinamento Docenti Universitari Malattie dell'Apparato Digerente Editrice Gastroenterologica Italiana ISBN 978-88- 7781-814-0

Malattie dell'Apparato Gastrointestinale (4/ed) Nuova Edizione 2008 Lajos Okolicsanyi, Anacleto Peracchia, Luigi Roncoroni Ed.
McGraw Hill ISBN: 9788838623868

Sleisinger & Fordtran's Gastrointestinal and Liver Disease E-dition. Text with Continually Updated Online Reference (www.sfgastro.com): Pathophysiology, Diagnosis, Management & Liver Disease (Sleisinger/Fordtran). Eds: Feldman, Mark;
Friedman, Lawrence; Brandt, Lawrence J. ISBN: 978-1-4160-3245-8

ENDOCRINOLOGIA

"Malattie del Sistema Endocrino e del Metabolismo" Giovanni Faglia, Paolo Beck-Peccoz IV edizione giugno 2016, Collana
Patologia sistematica medica e chirurgica, Edito da McGraw-Hill ISBN 9788838623929 "Endocrinologia e metabolismo" Giovanni Faglia, Paolo Beck-Peccoz, Anna Spada, Andrea Lania. Edizione 2009, Collana Core Curriculum, Edito da McGraw-Hill. ISBN: 9788838639586.

"HARRISON - Endocrinologia Clinica" J. Larry Jameson Edizione 2007, Edito da McGraw- Hill. ISBN: 9788838639210

BIOCHIMICA CLINICA

McPherson RA, Pincus MR Henry's Clinical Diagnosis and Management by Laboratory Methods, 23a edizione in lingua inglese. Ed. Elsevier, 2016 Federici G. Medicina di laboratorio ed McGraw-Hill. IV edizione, 2014 Marshall W, Lapsley M., Day
A Clinical chemistry ed Mosby. 8a edizione in lingua inglese. Ed. Elsevier, 2016

SEMEIOTICA CHIRURGICA

Chirurgia Generale (Metodologia, Patologia, Clinica chirurgica) R. Bellantone, G. De Toma, M. Montorsi Ed. Minerva Medica, Torino, 2009

Semester

Second semester.

Assessment method

Written and oral test.

Office hours

Students can book an appointment with the Faculty by email.