Universitat de Lleida

DEGREE CURRICULUM

DIGESTIVE SYSTEM DISEASES

Coordination: PIÑOL FELIS, MARIA CARMEN

Academic year 2022-23

DIGESTIVE SYSTEM DISEASES 2022-23

Subject's general information

<table>
<tr><td>Subject name</td><td>DIGESTIVE SYSTEM DISEASES</td></tr>
<tr><td>Code</td><td>100565</td></tr>
<tr><td>Semester</td><td>PRIMER QUADRIMESTRE</td></tr>
<tr><td>Typology</td><td>
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<tr><th>Degree</th><th>Course</th><th>Character</th><th>Modality</th></tr>
<tr><td>Bachelor's Degree in Medicine</td><td>4</td><td>COMPULSORY</td><td>Attendance-based</td></tr>
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<tr><td>Course number of credits (ECTS)</td><td>7</td></tr>
<tr><td>Type of activity, credits, and groups</td><td>
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<tr><th>Activity type</th><th>PRALAB</th><th>PRAULA</th><th>TEORIA</th></tr>
<tr><td>Number of credits</td><td>0.2</td><td>1.2</td><td>5.6</td></tr>
<tr><td>Number of groups</td><td>8</td><td>4</td><td>1</td></tr>
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<tr><td>Coordination</td><td>PIÑOL FELIS, MARIA CARMEN</td></tr>
<tr><td>Department</td><td>MEDICINE</td></tr>
<tr><td>Important information on data processing</td><td>Consult this link for more information.</td></tr>
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DIGESTIVE SYSTEM DISEASES 2022-23

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DIGESTIVE SYSTEM DISEASES 2022-23

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Learning objectives

Competence 90. Recognize, diagnose and guide the management of the main pathologies of the digestive system

Objectives:

- The student will be able to know the main pathologies of the abdomen and digestive system.

- The student will be able to interpret the diagnostic procedures used.

- The student will be able to formulate the various medical-surgical therapeutic options.

Competence 126. Pathological anatomy of the different devices and systems

Objectives:

- Acquire the bases, concepts and the anatomopathological vocabulary necessary to understand the pathophysiology, semiology, evolution and treatment of diseases of the digestive system.

- Being able to understand and use a pathological diagnostic report.

-Understand the importance of Pathological Anatomy in the process of reasoning and medical diagnosis of digestive pathology.

- Be aware of how fundamental the clinical-pathological correlation is in diseases of the digestive system.

Competence 127. Biochemical, cytogenetic and molecular biology markers applied to clinical diagnosis

Objectives:

- Know and know how to apply the concepts specified in the theoretical program that are established in the topics Celiac Disease, hereditary CRC, Sd. of polyposis and metabolic diseases of the liver.

- Know how to use the concepts related to these thematic contents to guide the most appropriate genetic counselling of the aforementioned pathologies.

Competence 139. Pharmacology of the different devices and systems

Objectives:

- Integration of previous knowledge, especially of physiology, biochemistry, cell and molecular biology.

- Projection of the aforementioned knowledge towards the treatment of patients with chemical substances, that is, drugs.

- Knowledge of the language and concepts of Pharmacology.

Competence 155. Knowing how to properly use the various drugs

Objectives:

- Knowledge of the most significant drugs and the main drug groups available to the doctor.

- Upon completion of the subject, students must be able to assess the pharmacokinetic and pharmacodynamic aspects that condition the therapeutic use of the drugs studied.

- Scientific criteria and rationality in the prescription of medicines.

Competences

CG7. Understand and recognize the normal structure and function of the human body, at the molecular, cellular, tissue, organic and systems levels, in the different stages of life.

90) Recognize, diagnose and guide the management of the main pathologies of the digestive system

126) Pathological anatomy of the different devices and systems

127) Biochemical, cytogenetic and molecular biology markers applied to clinical diagnosis

139) Pharmacology of the different devices and systems

155) Know how to use the various drugs properly

Other competences that are not of the subject, but are of the degree

Other competences that are not part of the degree

Subject contents

BLOC: DISEASES OF THE DIGESTIVE SYSTEM (I-A):

I-A.1 Lectures (LM):

- LM-1: Anatomical review. Malformations, trauma, infections and tumors. ***Dr. Villalobos (Surg. 1 hour).***

Know the surgical anatomy of the abdominal wall, its topography and its functions. Describe the surgical incisions of the abdominal wall in relation to its anatomy. Identify and differentiate alterations in the normal anatomy of malformations of the abdominal wall (the anterior and posterior walls of the diaphragm and the floor of the perineum) and know their symptoms. Propose and understand immediate therapy and definitive therapeutic options. Know the abdominal wall injuries without involvement of intra-abdominal viscera and propose treatment. Identify the hematoma of the anterior rectus muscles and describe its particularities. Define and correctly guide the treatment of infectious pathology of the navel. Identify and guide the treatment of the most frequent and important tumors of the abdominal wall. Prepare a clinical history of each of the pathologies of the abdominal wall: main malformations, trauma, infections and tumors.

- LM-2: Abdominal wall. ***Dr. Villalobos (Surg. 1 hour).***

Know the peritoneum, the peritoneal cavity and the retroperitoneum. Know the surgical anatomy of the inguinocrural region. Identify the superficial inguinal foramen and the deep inguinal foramen. Describe the Fruchaud quadrilateral. Know how to perform an abdominal exploration in surgery.

- LM-3: Hernia pathology. ***Dr. Villalobos (Surg. 2 hours).***

Define what an abdominal wall hernia is and describe where it can occur. Identify training mechanisms and their incidence. Know how to classify the different abdominal wall hernias according to their location: inguinal, indirect and direct, femoral, umbilical, epigastric or others. Know the clinic. Describe complications such as incarceration, or strangulation. Know how to perform the differential diagnosis. Know the treatment, and the different types of techniques: open and laparoscopic. Know the complications of surgery. Define what an eventration and an evisceration are. Learn to classify them. Know the clinic. Know how to make the diagnosis and differential diagnosis. Know the different surgical techniques and know how to monitor them.

- LM-4: Diaphragmatic pathology. ***Dr. Villalobos (Surg. 1 hour).***

Know the surgical anatomy of the diaphragm. Define diaphragmatic pathology. Know the different types of diaphragmatic pathology: functional, structural, infectious, or tumoral. Know what a diaphragmatic hernia is and how they are classified. Know the clinic. Identify the complementary tests that allow reaching the diagnosis. Know your complications. Know how to perform the differential diagnosis. Know the treatment and the different surgical techniques. Know how to perform postoperative follow-up.

- LM-5: Esophageal pathology. ***Dr. Tarragona (A-P, 1 hour).***

Methodology of the morphological study of the esophago-gastrointestinal tract. (Cytology, biopsy and surgical piece). Congenital anomalies. Tracheo-esophageal fistula. Define histological lesions of Achalasia, Scleroderma, reflux esophagitis and Barrett's esophagus. Know esophageal tumors.

- LM-6: Esophageal surgical pathology. ***Dra. Santamaria (Surg. 2 hours).***

Know the anatomy and embryology of the esophagus. Know how to classify esophageal tumors (benign/malignant). To know the incidence, the etiopathogenesis and the clinic. Know how to establish the diagnosis and prognosis. Know how to perform TNM staging and make the therapeutic decision according to it (Tumor Committee). Know the surgical treatment (operative technique). Be able to recognize postoperative complications and know how to treat them. Know the postoperative follow-up. Know what is gastro-esophageal reflux and what is its etiology. Know what a hiatal hernia is. Know how it is classified and what is its clinic. Know how to make the diagnosis and what is the surgical treatment, when medical treatment fails, in terms of techniques and indications. Know esophageal trauma and know what its etiology is, where it is located, what the clinic is, how it can be diagnosed and what the treatment is. Know how to identify esophageal perforation. Describe Boerhaave syndrome.

- LM-7: Gastric Pathology. ***Dr. Tarragona (A-P, 1 hour).***

Know the histology of gastritis. Know the morphology of Helicobacter pylori. Explain the gross and microscopic anatomopathological findings of peptic ulcer. Know the types of gastric tumors.

- LM-8: Gastritis. Functional digestive disorders. ***Dra. Planella (Digestive Med, 1 hour).***

Define and classify gastritis. Describe the manifestations of non-erosive (non-specific) chronic gastritis. Determine gastric secretion patterns and gastrin levels. Indicate its effects on the production of intrinsic factor and its consequences. Point out the relationship with pernicious anemia and other autoimmune diseases. Establish the relationship with gastric cancer. Indicate therapy. Recognize the dyspepsia concept and its social importance, and etiopathogenesis. Recognize the clinical forms of functional dyspepsia. Indicate medical treatment options.

- LM-9: Peptic ulcer. Upper gastrointestinal bleeding. ***Dra. Planella (Digestive Med, 1 hour).***

Know the role of Helicobacter Pylori infection in gastroduodenal pathology. Describe the clinical manifestations of peptic ulcer. Discuss the complications of peptic ulcer. Use the appropriate diagnostic tests. Plan the medical therapeutic scheme. Classify and list the main causes of upper gastrointestinal bleeding. Describe the clinical syndrome. Make an initial evaluation: identification, magnitude and activity of the hemorrhage. Know the hemodynamic resuscitation measures. Explain the diagnostic methodology. Formulate the relevant therapeutic

recommendations: pharmacological and endoscopic

- LM-10: Gastric surgical pathology. ***Dra. Santamaria (Surg. 2 hours).***

Know the surgical anatomy of the stomach (vascularization and lymphatic system). Know how to classify gastric tumors (benign/malignant). To know the incidence, the etiopathogenesis and the clinic. Know how to make the diagnosis and know the prognosis. Know how to perform TNM staging and treatment according to stage (Tumor Committee). Know the surgical treatment and the different techniques depending on the location. Learn about postoperative complications and their treatment. Know how to perform postoperative follow-up and discharge recommendations. Know the surgical treatment of gastric ulcer (when medical treatment fails). Know the complications of duodenal ulcer (perforation, hemorrhage and pyloric stenosis) and the different surgical techniques: pyloroplasty, antrectomy, and gastroenteroanastomosis. Know what a gastric volvulus and a bezoar are (definition, clinical symptoms, diagnosis and surgical treatment).

- LM-11: Pathology of the small intestine. ***Dr.Tarragona (A-P, 1 hour).***

Know histopathological changes of malabsorption, as well as the different syndromes and diseases that occur with malabsorption. Explain the histopathologic features of Whipple's disease and similar conditions. Know the types of tumors of the small intestine.

- LM-12: Malabsorptive diseases. ***Dra. Planella (Digestive Med, 2 hours).***

Recognize the clinical manifestations of Sd. Malabsorptive. Identify the analytical alterations of Sd. Malabsorptive. Explain the diagnostic tests for Sd. Malabsorptive. Describe the etiology, clinical picture, diagnosis and specific therapy of the main malabsorption diseases: celiac disease, tropical sprue, disaccharidase deficiency, short bowel syndrome, bacterial overgrowth syndrome, eosinophilic gastroenteritis, hypogammaglobulinemic enteropathy, abetalipoproteinemia, Whipple, immunoproliferative disease of the small intestine. Describe the histological findings of malabsorptive diseases. List the causes of protein-deprived enteropathy. Expose the clinical characteristics of intestinal lymphangiectasia.

- LM-13: Inflammatory bowel pathology. ***Dr. Tarragona (A-P, 1 hour).***

Define the histopathology and make the differential diagnosis between ulcerative colitis and Crohn's disease. Learn about other types of colitis.

- LM-14: Chronic inflammatory bowel disease (Crohn's disease and ulcerative colitis). ***Dra. Planella (Digestive Med, 2 hours).***

Delimit the concept of idiopathic chronic inflammatory bowel disease (MIIC) and define the basic characteristics of the two most important entities: Crohn's disease and ulcerative colitis. Know the epidemiology of MIIC. List the etiopathogenic factors involved in the production of MIIC. Recognize the extraintestinal and local clinical manifestations. Describe local and systemic complications. Know the most appropriate diagnostic methods. Establish the differential diagnosis. Determine the evolutionary prognosis. Formulate medical-surgical treatment options.

- LM-15: Polyps and Sd. Polyposis. ***Dra. Planella (Digestive Med, 1 hour).***

List the classification of colorectal polyps. Know the clinic, the diagnostic procedure and endoscopic therapy. Describe the main characteristics of malignancy of polyps and relate the polyp-cancer sequence. Express the usefulness of monitoring patients with polyps for the early diagnosis of colorectal cancer. Recognize the main hereditary and non-hereditary intestinal polyposis syndromes.

- LM-16: Acute appendicitis. ***Dr. Muriel / Dra. Salvador (Surg. 1 hour).***

Know the anatomy of the appendix and its anatomical locations. Define what acute appendicitis is. Know what its frequency and mortality are. Identify the etiopathogenesis. Know the different pathological forms. Know the pathophysiology. Know what the clinic is and what the classic signs of exploration are. Know the different complementary explorations. Know the different clinical forms of presentation depending on the appendicular location and the age of the patient. Know how to perform the differential diagnosis. Know the concept of appendicular plastron. Know the complications and surgical treatment. Know the scheme of action, placement of

drains and use of postoperative antibiotics. Know the different open and laparoscopic surgical techniques.

- LM-17: Surgical pathology of the small intestine and colon. *Dr. Escoll (Circ. 1 hour).*

Know how to identify the Pathology of the small intestine. Know the anatomy and physiology of the small intestine. Know the surgical nomenclature. Know how to identify congenital pathology: atresia, intestinal malrotation, invagination or intussusception, Meckel's diverticulum. Know what intestinal fistula is, as well as its clinic and treatment. Identify short bowel syndrome. Know benign and malignant intestinal tumors (adenocarcinoma, carcinoid tumor, GIST tumor). Learn about appendicular tumors (carcinoid, adenocarcinoma and mucinous cystadenocarcinoma or appendicular pseudomyxoma). Know the anatomy of the colon, especially the arterial and venous vascularization, the vulnerable points and the lymphatic drainage. Know the physiology of the colon. Know how to identify benign diseases of the colon. Know the clinic and surgical treatment of ulcerative colitis. Know the clinic and surgical treatment of Crohn's disease. Know what ischemic colitis is. Know how to identify the etiopathogenesis of colon diverticulosis, as well as know acute diverticulitis, Hinchey's classification and its treatment. Know what colonic volvulus, colonic angiodysplasia, colonic pseudo-obstruction or Ogilvie's syndrome and Hirschsprung's disease are.

- LM-18: Colon cancer and rectal cancer. *Dr. Escoll (Circ. 1 hour).*

Know the incidence, epidemiology and etiopathogenesis of colon cancer. Identify risk factors for CRC. Know how to perform CRC Screening or screening. Know the location of the CRC and the routes of dissemination. Get to know the CRC clinic. Know how to diagnose CRC: clinical history and physical examination; Tumor markers; tumor study; extension study; of the CCR; stage and TNM classification. Know the surgical treatment of CRC: bases of treatment and laparoscopic surgery; Right and left hemicolectomy, sigmoidectomy, lymphadenectomy, urgent surgeries (colon endoprosthesis, Hartmann intervention, ileostomy and mucous fistula. Know postoperative complications. Identify poor prognosis factors based on pathological anatomy.

- LM-19: Anorectal malformations. Anorectal trauma. Strange bodies. Anal infectious pathology: anorectal abscesses and fistulas. Pilonidal cyst. Anorectal prolapse. Hemorrhoids. Anus fissure. Anal cancer. *Dra. Mestres (Circ. 1 hour).*

Describe the main anorectal malformations, classify and propose surgical therapeutic options according to their efficacy, efficiency and effectiveness and according to the sequelae and subsequent quality of life. Formulate the emergency treatment and describe the definitive therapeutic options for anorectal trauma, with its morbimortality and sequelae. Propose the treatment of intrarectal foreign bodies. Know the acute ano-perineal pathology and know how to make the differential diagnosis and guide the treatment. Describe the anatomical variants of anorectal abscesses and fistulas, acute and chronic symptoms, diagnosis, therapeutic options, prognosis, complications and sequelae. Diagnose pilonidal cyst in acute and chronic phase. Know how to diagnose and classify rectal prolapse. Know its pathophysiology and therapeutic options, morbidity and prognosis.

- LM-20: portal hypertension. Digestive bleeding due to rupture of esophago-gastric varices. *Dra. Huelin (Digestive Med, 1 hour).*

State the concept of portal hypertension. Describe the clinical consequences of portal hypertension. To determine the evaluation methodology of the patient with portal hypertension. Expose the hemodynamic classification and etiology of the various types of portal hypertension. Identify gastrointestinal bleeding due to rupture of esophageal varices. Design and plan the various alternatives for the medical treatment of hemorrhage due to portal hypertension: endoscopic, pharmacological treatment, esophageal tamponade and percutaneous intrahepatic portosystemic shunt (PIPS).

- LM-21: Alcoholic liver disease. Acute hepatitis. Chronic hepatitis. *Dr. Tarragona (A-P, 1 hour).*

Distinguish the spectrum of alcohol-induced liver diseases and discuss the main histological features of alcoholic hepatitis. List the main etiological agents of acute viral hepatitis. Know the histological findings that define an acute viral hepatitis. Define the term chronic hepatitis and the most frequent causes. Distinguish between lobular hepatitis, portal hepatitis, and periportal hepatitis. Know the different evolutionary histological phases of chronic liver disease and the role of liver biopsy in monitoring the disease.

- LM-22: drug and toxic hepatitis. Liver and alcohol. *Dra. Huelin (Digestive Med, 1 hour).*

Define the concept of toxic hepatitis. List the mechanisms of hepatotoxicity and the types of acute and chronic injuries that can be produced by toxic and medicinal substances. Know the most common liver toxins. Describe the clinical and analytical manifestations. Recognize the pathogenesis of alcohol-induced liver diseases. To establish a clinical-pathological correlation of alcoholic liver disease. Describe the symptoms and the type of liver lesions that can cause chronic alcoholism: hepatic steatosis, acute alcoholic hepatitis and alcoholic liver cirrhosis. Know how to distinguish the different prognosis of each of the liver injuries caused by alcohol. Formulate therapeutic recommendations.

- LM-23: Acute hepatitis. ***Dra. Piñol (Digestive Med, 2 hours).***

Know the characteristics of the etiological agents. List the transmission mechanisms. Describe the clinical manifestations. Know the concept of severe acute liver failure. Identify the laboratory abnormalities accompanying acute hepatitis. To analyze the value of serological markers as an etiological diagnosis. Propose prevention and prophylaxis measures. Formulate therapeutic recommendations.

- LM-24: Chronic hepatitis. ***Dra. Piñol (Digestive Med, 1 hour).***

Define the clinical concept. Classify according to etiology. Describe the clinical manifestations. To determine the natural history and prognosis of chronic hepatitis based on the etiology and the histological lesion. To assess the role of liver biopsy in the diagnosis and monitoring of chronic hepatitis. Formulate therapeutic possibilities.

- LM-25: Liver Cirrhosis. Liver tumors: Benign tumors; Malignant tumors (Hepatocarcinoma and Cholangiocarcinoma). ***Dr. Tarragona (A-P, 1 hour).***

Define the concept of liver cirrhosis and the most important morphological types. List the main etiological agents of cirrhosis. Explain the meaning of regeneration nodule and fibrous septa. Know the most important benign tumors that can be found in the liver. Define the concept of hepatocellular carcinoma and cholangiocarcinoma, and explain the role of liver biopsy in their diagnosis.

- LM-26: Liver cirrhosis: etiology, clinical symptoms, diagnosis, complications and prognosis. ***Dra. Huelin (Digestive Med, 1 hour).***

Define the concept of liver cirrhosis and its frequency in our environment. List the main causes. Describe the clinical manifestations and skin signs of chronic liver disease. Know and interpret the accompanying analytical alterations. Expose diagnostic methods. List and understand the complications of cirrhosis: encephalopathy, gastrointestinal bleeding, ascites, bacterial infections (with special emphasis on spontaneous bacteremia and spontaneous bacterial peritonitis), hepatocarcinoma, gastrointestinal bleeding, sd. Hepatorenal. Know the pathophysiological mechanisms of ascites and renal function disorders. Know the pathogenesis of hepatic encephalopathy. Know the evolutionary prognosis and follow-up of patients with compensated and decompensated liver cirrhosis. Know the Child-Pugh classification and its usefulness.

- LM-27: Liver cirrhosis: treatment. Metabolic diseases of the liver. ***Dra. Huelin (Digestive Med, 2 hours).***

Formulate therapeutic recommendations for compensated and decompensated cirrhosis. Point out the specific therapeutic attitude of the patient with encephalopathy as well as the triggering factors. Indicate and prioritize the therapeutic attitudes before a cirrhotic patient with ascites. Define the concept of refractory ascites. Describe what the LeVeen shunt and perfusion paracentesis consist of and know their indications. Explain the concept of hepatorenal syndrome in chronic liver disease. Know the concept of spontaneous bacterial peritonitis and describe the possible mechanisms by which it occurs. List the germs most frequently involved. Identify the usual clinical manifestations and perform the differential diagnosis with other similar processes. Establish the prognosis of the entity and determine the most convenient therapeutic approach. Review the main indications for liver transplantation in this disease. Know the genetic alterations of hemochromatosis and Wilson's disease. Describe the clinic of each. List the diagnostic criteria and therapeutic approach. Establish early diagnosis to first-degree relatives. Recognize the liver involvement that can occur in the course of diseases due to porphyrin metabolism disorders.

- LM-28: Chronic cholestatic diseases of the liver. Vascular diseases of the liver. Liver fibrosis. ***Dra. Huelin (Digestive Med, 1 hour).***

Define the concept of primary biliary cirrhosis (PBC). State the concept of primary sclerosing cholangitis (PSC).

List and characterize the stages of primary biliary cirrhosis. Determine the clinical manifestations and complementary tests of PBC. Know the clinical, biological, histological and radiological characteristics of PSC. Establish the differential characteristics. Indicate the prognosis and treatment options for both entities. Define the frequency and etiopathogenesis of vascular diseases of the liver. Describe the general symptoms, the diagnosis and the corresponding treatment. Indicate the clinical findings that most frequently lead to the diagnosis of liver fibrosis.

- LM-29: portal hypertension. Liver abscesses. Hydatid cyst. ***Dr. Escartin (Surg., 1 hour).***

Know the radiological and surgical treatments of portal hypertension, their indications and their applicability. Know the different types of liver abscesses (pyogenic and amoebic), their diagnosis and treatment, both medical and surgical. Know the biology of the granular echinococcus, the formation of the hydatid cyst, its clinical implications, its diagnosis and current therapeutic options.

- LM-30: Liver tumors: Benign tumors; malignant tumors; Liver metastases. ***Dr. Escartin (Surg. 1 hour).***

Know the different types of liver tumors and the criteria on which they are based to classify them into benign and malignant, as well as the surgical indications for each one and the current liver resection techniques.

- LM-31: Gallstones. ***Dr. Muriel / Dra. Salvador (Surg. 1 hour).***

Know the frequency, geographical distribution and target patients of gallstones. (5F) Identify risk factors. Know the types of gallstones. Know the pathophysiology of gallstones. Know the clinic of symptomatic gallstones. Know what is biliary colic, what is its physical examination, what is Murphy's sign. Know the complementary explorations to be able to make the diagnosis. Know the complications: acute and chronic cholecystitis, choledocholithiasis, cholangitis, gallbladder hydrops, enterobiliary fistula, gallstone ileus, and porcelain gallbladder. Know the treatment of gallstones by laparoscopic cholecystectomy. Knowing what is considered minimally invasive surgery. To know its advantages and its possible applications to biliary pathology. Know how to describe the cholecystectomy technique.

- LM-32: Choledocholithiasis. ***Dr. Muriel / Dra. Salvador (Surg. 1 hour).***

Know what choledocholithiasis is and what its incidence is. Identify preoperative and intraoperative diagnostic methods. Know the types of treatment for choledocholithiasis and when to perform it during the evolution of the disease. Know conventional open surgery, choledochoscopy, papillotomy and endoscopic sphincterotomy. Know the action protocols against cholelithiasis and suspicion of choledocholithiasis. Know the results of the different technical options.

- LM-33: Tumors of the bile ducts and the ampulla of Vater. Pathology of the Pancreas: Acute and chronic pancreatitis. Carcinoma. ***Dr. Tarragona (A-P, 1 hour).***

Know and describe the most frequent tumors that are donated in the gallbladder and ampulla of Vater. List the etiological factors of acute pancreatitis and know the morphological appearance of the lesion. Explain the concept of chronic pancreatitis. Know the histological characteristics, as well as the clinical and prognostic implications of pancreatic adenocarcinoma.

- LM-34: Acute pancreatitis. ***Dr. Rodriguez (Digestive Med, 1 hour).***

Define the concept. Explain the etiopathogenesis. Describe the clinic and expose the associated complications. Identify accompanying laboratory abnormalities. Know how to use diagnostic imaging tests. Formulate therapeutic recommendations.

- LM-35: Chronic pancreatitis. ***Dr. Rodriguez (Digestive Med, 1 hour).***

Define the concept of chronic pancreatitis. List the possible etiologies of this disease. Explain the usual clinical course as well as the most frequent complications. Describe the most relevant analytical, functional and radiological alterations that allow the diagnosis of this pathology. Point out the bases of medical treatment with special emphasis on exocrine pancreatic insufficiency.

- LM-36: Acute and chronic pancreatitis. Surgical treatment. ***Dr. Muriel / Dra. Salvador (Surg. 1 hour).***

Know what acute pancreatitis is. Know how to define complications according to Atlanta 2. Know the objectives of surgical treatment. Know how to identify the criteria to indicate the surgery as well as the moment of it. Know the drainage techniques and the technical options: closed procedure, open procedure, translumbar retroperitoneal approach, retroperitoneal endoscopy. Define chronic pancreatitis. Know the types of treatment: medical, denervation, endoscopic and surgical decompression. Know the treatment of the pseudocyst. Know the indications for pancreas transplantation and the different types of gland and islets.

- LM-37: Cholangiocarcinoma. ***Dr. Muriel / Dra. Salvador (Surg. 1 hour).***

Know the nomenclature and classification of cholangiocarcinoma. Know its location, epidemiology and risk factors. Know how to identify gallbladder neoplasia, what is its epidemiology, how to make the diagnosis and what is its clinic. Know the prognosis and guide the therapeutic management of cholangiocarcinoma and gallbladder neoplasia. Learn about surgical and palliative treatment.

- LM-38: Pancreatic neoplasm. ***Dr. Muriel / Dra. Salvador (Surg. 1 hour).***

Know the incidence, epidemiology, etiology of pancreatic neoplasia. Identify the Courvoisier Terrier sign. Know the tumor markers. Know how to make the diagnosis and know the imaging methods. Know the different types of treatment: palliative and resective. Identify the surgical requirements for its removal.

I-A.2 Seminars on medical digestive clinical cases (SeDigMed):

Groups of 20 students. 4 seminars of 2 hours each. Through interactive workshops with presentation of case histories and discussion by students, it is intended that they acquire skills in diagnostic methodology, differential approaches and therapeutic approaches.

Seminar 1 on functional digestive disorders and peptic ulcer. ***Dra. Piñol (2 hours).***

Discuss 4 cases of functional dyspepsia and/or peptic ulcer. Perform the differential diagnosis. Organize a diagnosis and treatment plan. Properly use complementary examinations. Distinguish between complicated and uncomplicated peptic ulcer. Identify ulcer and duodenal on endoscopic images. Develop a treatment plan.

Seminar 2 on chronic diarrhea. ***Dra. Piñol (2 hours).***

Discuss 4 cases of chronic diarrhea. Perform the differential diagnosis. Properly use complementary examinations. Identify the malabsorption pattern in an intestinal transit, and expose the diagnostic value of intestinal biopsy. Organize a diagnosis and treatment plan.

Seminar 3 on lower gastrointestinal bleeding (HDB). ***Dra. Piñol (2 hours).***

Discuss 4 cases of HDB. Perform a differential diagnosis. Properly use complementary examinations. Organize a diagnosis and treatment plan.

Seminar 4 on chronic hepatitis and liver cirrhosis. ***Dra. Piñol (2 hours).***

Discuss 4 cases with persistently elevated hypertransaminasemia and/or decompensated cirrhosis. Differentiate between its possible causes. Properly use complementary examinations. Determine in a liver biopsy the presence of: persistent chronic hepatitis, active chronic hepatitis and active cirrhosis. Provide treatment. Use in various combinations endoscopy, ultrasound, CT, paracentesis, laboratory tests, to diagnose: EBP, hepatocarcinoma, variceal hemorrhage, spontaneous bacteremia. Develop a treatment plan for each situation.

I-A.2 Seminars on surgical digestive (SeDigQ):

Big group. 11 seminars of 1 hour each. Through interactive workshops with the presentation of clinical histories of practical cases and discussion by the students, it is intended that they acquire skills in diagnostic methodology, differential approaches and therapeutic approaches.

Seminar 1- Motor dysphagia. ***Dra. Santamaria (1 hour).***

Pathophysiology of esophageal motility. Dysphagia. Types according to location (oropharyngeal and esophageal) and cause (motor and mechanical). Diagnosis (manometry, TEGD and endoscopy). Manometry (method,

indications, clinical utility). Achalasia. Scleroderma.

Seminar 2- Colon cancer and rectal cancer. *Dr. Escoll (1 hour).*

Know how to identify the characteristics of rectal cancer. Review the anatomy of the rectum. Know what is the Total Excision of the Mesorectum (TME). Know how to diagnose rectal cancer. Know the surgical treatment of rectal cancer: Low anterior resection (LAR), abdominoperineal amputation (AAP) or Miles intervention, Transanal Endoscopic Microsurgery (TEM). To know neoadjuvance in rectal cancer. Know the complications of rectal cancer.

Seminar 3 - Anorectal malformations. Anorectal trauma. Strange bodies. Anal infectious pathology: anorectal abscesses and fistulas. Pilonidal cyst. Anorectal prolapse. Hemorrhoids. Anus fissure. anal cancer. *Dra. Mestres (1 hour).*

Know the classification of hemorrhoids, describe the symptoms, make the differential diagnosis and propose therapeutic options; know how to be critical with these options. Diagnose a fissure of the anus, understand its pathophysiology and correctly guide its treatment. Know how to diagnose anal cancer. Propose therapeutic options according to their morbidity, sequelae and prognosis. Describe causes of pelvic floor pathology. Know how to perform the differential diagnosis and describe the clinic of the different pathologies, as well as the diagnostic tests necessary to arrive at the diagnosis. Guide the treatment of the different pathologies of the pelvic floor.

Seminar 4 - Intestinal occlusion. *Dra. Rufas (1 hour).*

Define intestinal occlusion. List the different causes and know the most frequent. Explain the pathophysiology. Know the classification according to the form of presentation, location, intensity and pathogenesis. Identify your clinic. Know the complementary explorations. Know how to carry out a therapeutic plan, Know the surgical treatment. Define intestinal pseudo-obstruction. Learn to classify it. Define paralytic ileus. Know its causes and the clinic it presents. Know how to make the diagnosis. Evaluate the therapeutic attitude. Identify surgical treatment. Define O'Gilvie syndrome: Identify the causes. Know the clinic. Know how to make the diagnosis. Evaluate the therapeutic attitude. Know the surgical treatment. Know how to make the differential diagnosis between intestinal obstruction and intestinal pseudo-obstruction.

Seminar 5 - Acute abdomen. *Dr. Escoll (1 hour).*

Define acute abdominal pain and differentiate it from acute abdomen. Knowing how to carry out a clinical history of directed abdominal pathology. Know the physiopathogenesis of abdominal pain. Know how to perform abdominal examination by quadrants, as well as its differential diagnosis. Know the characteristics of abdominal pain. Know how to identify the associated symptomatology. Know how to perform the physical examination and rule out SIRS and asepsis. Know the special surgical signs of abdominal exploration (McBurney, Murphy, Blumberg, etc.). Know the syndromic diagnosis (inflammatory, obstructive, ischemic or traumatic pathology). Assess examples of abdominal pathology in simple abdominal radiology. Discuss clinical cases on: Acute appendicitis. Acute cholecystitis. Acute diverticulitis. Pelvic inflammatory disease. Perforated duodenal ulcer. Occlusion due to gallstone ileus. Occlusion due to bezoar. Complicated colon neoplasty. Complicated inflammatory bowel disease. Adhesion syndrome. Complicated inguinal and femoral hernia. Massive intestinal and colon ischemia. Hemoperitoneum.

Seminar 6 - Abdominal trauma. *Dr. Escartin (1 hour).*

Know the different types of abdominal trauma (open and closed). Know how to assess the mechanisms of production and the different types of injuries. Know how to manage the patient, surgical indications and know how to identify the different treatments according to the affected organ.

Seminar 7 - Intestinal ischemia. *Dra. Rufas (1 hour).*

Know the intestinal vascularization. Define mesenteric ischemia. Know how to make the differential diagnosis between the different types of acute arterial mesenteric ischemia (embolism, thrombosis and non-occlusive) and chronic. Know the incidence and epidemiology. Identify risk factors. Know the clinic. Know how to perform diagnostic assessment and therapeutic management. Know the surgical treatment. Know how to assess evolution and results. Define ischemic colitis. Know the incidence and risk factors. Identify the clinic. Know how to perform diagnostic assessment and therapeutic management. To know the surgical treatment, its evolution and the results.

Seminar 8 - Liver tumors: Benign tumors; malignant tumors; Liver metastases. *Dr. Escartin (1 hour).*

Know the different types of liver tumors and the criteria on which they are based to classify them into benign and malignant, as well as the surgical indications for each one and the current liver resection techniques.

Seminar 9 - Liver transplant. *Dr. Escartin (1 hour).*

Know the indications for liver transplantation, as well as the contraindications, the logistics of the liver donor and recipient. Know the results and complications

Seminar 10 - Pancreatic neoplasm. *Dr. Muriel / Dra. Salvador (Surg. 1 hour).*

Know the surgical techniques, surgical complications, survival and prognostic factors. Learn about palliative treatments. Know the cystic tumors and IPMN of the pancreas. Know its classification and know how to perform the differential diagnosis.

Seminar 11 - Surgery of the spleen. *Dr. Muriel / Dra. Salvador (1 hour).*

Know the surgical anatomy of the spleen. Know the indications for splenectomy. Identify hematological diseases and splenic injuries. Know the technical aspects of elective splenectomy. Learn about open and laparoscopic splenectomy.

Methodology

To achieve the objectives and acquire the assigned skills, the following activities will be scheduled:

- Master classes. (CM)

These will be carried out with all the students and are not compulsory. Their purpose is to provide an overview of the thematic content, highlighting those aspects that will be useful in their training as doctors.

- Seminars. (Sem)

These will be carried out with the whole group or with groups of 1/4 of the students, those marked as such are mandatory, and must be carried out with the corresponding group. The purpose of the seminars is for students to apply theoretical concepts and face real clinical cases so that diagnostic and therapeutic concepts can be discussed. Active student participation is essential. These sessions also allow a more in-depth approach to certain topics considered fundamental. The seminars include the activities of discussion groups, case discussions, video - forums, etc. and simulations (roleplaying).

- Virtual activities. (Av)

These activities will be carried out through the UdL Virtual Campus (Sakai). Taking advantage of this space, students will do different activities related to the preparation of thematic content, the application of concepts, teamwork and completion of assignments.

Evaluation

Evaluation system

The final mark will be the sum of the different aspects evaluated and according to the following considerations:

Evaluation Theory 80% final grade Continuous evaluation 20%

A total final grade of 5 is needed to pass the subject, taking into account the minimum of the theoretical evaluation to be able to compute the sum.

CONTINUOUS EVALUATION 20%: (It is not recoverable)

The score of this evaluation (2.0) does not count if the minimum of the final theoretical evaluation is not achieved.

Evaluation seminars (represents 20% final grade)

Only the Medical Digestive knowledge area will hold active seminars. In general, the continuous evaluation in each seminar will take into consideration: the quality of the individual work of the files, the work and the quality of the clinical cases presented, the active participation...

The Medical Digestive knowledge area will hold 4 seminars on clinical cases. The teaching material will be available on the Sakai platform. The support material is common to each group for the same seminar. But each group is assigned different cases, one case for each of the seminars. Each student must present their resolved case to comment on it in the seminar. The evaluation of the seminars will be carried out jointly, and a score will be issued out of 10 (this figure represents 20% of the continuous evaluation).

FINAL THEORETICAL EVALUATION 80%: (It is recoverable)

The conceptual and theoretical knowledge will be evaluated throughout the course by means of a test exam. The result obtained in these exams will constitute 80% of the final grade.

In order to pass the subject, a grade equal to or greater than 5 must be obtained in the global block of Digestive.

In a global way, provided that the minimum requirements of the theoretical evaluation of the Digestive block have been exceeded, the mark of the continuous evaluation may be added to the resulting mark obtained.

Failure to meet the previously mentioned requirements will result in a failure in the quarterly call, although the grade of that part that has been equal to or greater than 5 will be saved, without the need to present the two subjects again in the recovery of July.

The theoretical evaluation of the Digestive block will be carried out during the first evaluation period, in November. The total or partial recovery of the subjects will take place in July.

Digestive Block Assessment:

Multiple choice exam of the theoretical activity taught, both in lecture format and in seminar format.

Sixty-eight questions with five answers each and only one valid one. For every three questions answered incorrectly, one correct answer is deducted. The number of questions will be as follows: 68 Digestive questions (34 medical part and 34 surgical part). The corresponding Anatomy-Pathological questions are included in the two blocks (4 in the medical part and 4 in the surgical part)

The exercise will score out of 10 if all the answers are correct.

In the case of Digestive, as the medical part is comparable to the surgical part in terms of teaching weight, the minimum to pass the exam will be, as already mentioned, 5, but this requirement can only contemplate the following situations: minimum 5 of the medical part and a minimum of 5 for the surgical part, or 6 for the medical part and 4 for the surgical part and other equidistant values between these last ranges or vice versa (compensatory average)

Once these criteria have been applied, if the final grade obtained is not equal to or greater than 5, but has a value between 4 and 4.9, it will be considered as failing for the Digestive block, and therefore this matter will have to be made up at the end of the period. of recovery of July, although the mark of part equal to or greater than 5 will be saved, without the need to present the two subjects again to the recovery of July.

Evaluation period: The evaluation date of the Digestive notebook will be on xx-11-2022, at 12 noon and will last 1 hour 30 minutes.

RECOVERY:

The recovery period for all or part of the theoretical material will be on xx-06/07-2023, at 12 noon and will

last a maximum of 1 hour 30 minutes.

In the recovery of July, the same evaluation criteria will be maintained, but in this call if the aforementioned requirements are not met, the grade will be failed and will mean re-enrollment of the entire subject without saving any note of the two blocks.

The continuous evaluation (seminars) that will represent 20% of the final grade is not recoverable.

Bibliography

Además de les monografías y artículos de revistas que sobre temes concretos cada uno de los profesores recomendará, pueden utilizarse como una fuente de información básica, entre otros, los siguientes libros de texto, atlas y direcciones de internet:

Bibliografía (Anatomía Patológica Médica)

LIBROS DE TEXTO

- Cotran RS, Kumar V, Robbins SL. ***Robbins Patología Estructural y funcional.*** Interamericana, 8ª Edición 2007
- Pardo-Mindan,J. ***Anatomía Patológica.*** Ediciones Mosby/ Doyma, 1997
- Rubin E. ***Pathology.*** JB Lipincott Co, 1988
- Mac Sween, RNM and Whaley K. ***Patología de Muir.*** Ed. Interamericana, Mc Graw-Hill, 13 ed 1995
- Stevens A, Lowe J. ***Anatomía Patológica.*** Mosby/Doyma, 1996
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ATLAS

- Cooke RA and Stewart B. ***Atlas de Anatomía Patológica.*** Doyma, 1989
- Lefkowitch JH. ***Atlas de Histopatología.*** Doyma, 1992
- Doerr W, Schumann G, Ule G. ***Atlas de Anatomía Patològica.*** Salvat, 1976

Bibliografía (Cirugía)

LIBROS:

- Sabiston: Tratado de Cirugía: 2009
- JL Balibrea Cantero. Tratado de cirugía
- Cirugía de bolsillo. Balibrea cantero JL
- Fundamentos de Cirugía. Cristobal Pera
- Cirugía AEC. 2ª edición. Asociación española de cirujanos. P. Parilla y JI Landa
- Monografías de la asociación española de cirujanos www.aecirujanos.es/guias_clinicas_aec_tc.php
- Enciclopedie Medico Chirurgicale. Tecnica quirurgica.
- Asociación española de cirujanos. Coloproctología: 2000 Trullenque: Cirurgia digestiva: 2002

INTERNET (DIRECCIONES):

- Asociación española de cirujanos.: www.aecirujanos.es/
- Videoteca de la asociacion española de cirujanos: ww.aecirujanos.es/videotecaAEC.php
- Guías clínicas de la sociación nacional de cirujanos: www.aecirujanos.es/guias_clinicas_aec_tc.php
- Acceso a revistas y abstrats. PUB MED: http://www.ncbi.nlm.nih.gov/
- Acceso a Cochrane Library: www.update-software.com/clibplus/clibplus.asp
- Web de vídeos europea Estrasburgo. Websurg: www.websurg.com/virtual_university/
- Societat catalana de cirurgia: www.sccirurgia.org/

Bibliografía (Digestivo)

DIGESTIVE SYSTEM DISEASES 2022-23

LIBROS BÁSICOS:

- FARRERAS VALENTI, P; ROZMAN, C., editors. **Medicina Interna.** *Barcelona: Ediciones Doyma, última edició.*
- FAUCI, AS.; BRAUNWALD, E.; ISSELBACHER, KJ.; WILSON, JD.; MARTIN, JB.; KASPER, DL.; HAUSER SL.; LONGO DL.; editors. **Harrison principios de medicina interna.** *Madrid: Interamericana, última edició.*
- RODES TEIXIDOR J.; GUARDIA MASSÓ J.; editors. **Medicina Interna.** *Barcelona: Masson, última edició.*

LIBROS ESPECÍFICOS:

- RODES, J.; BENHAMOU, J.; BIRCHER, J.; McINTYRE, N.; RIZZETTO, M., Editors. **Tratado de hepatología clínica.** *Barcelona: Masson,. última edició.* VILARDELL, F., Editor. **Enfermedades digestivas.** *Madrid: Ediciones CEA, última edició.*
- SLEISENGER, MH.; FORDTRAN, JS., Editors. **Gastrointestinal and liver disease: pathophysiology, diagnosis, management**. *Filadèlfia: Saunders, última edició.*
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- *Revista Española de Enfermedades Digestivas*
- *Gastroenterology*
- *Hepatology*