CONFIRMED

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Study agenda for 2026/2027 academic year internal medicine
for 4th year student
of the faculty of training for foreign countries

1. Acid-associated diseases.

Gastroesophageal reflux disease (GERD): definition, epidemiology, major risk factors, pathogenesis, classification, clinical presentation. Extraesophageal manifestations of GERD: bronchopulmonary, otolaryngological, cardiological, dental. Instrumental diagnostics of GERD: esophagoscopy, daily pH-metry, X-ray examination, histological examination, manometry. Complications of GERD: esophageal strictures, bleeding, Barrett's esophagus. Risk factors for the development of complications of GERD. Treatment of GERD. Management of patients with Barrett's esophagus.

Functional gastric dyspepsia: definition, epidemiology, causes of development, pathogenesis, classification (Roman criteria), clinical manifestations. Diagnostic criteria for the syndrome of epigastric pain and postprandial distress syndrome, differential diagnosis. Treatment of functional gastric dyspepsia.

Chronic gastritis: definition, prevalence, role of exogenous and endogenous factors in the development of the disease, pathogenesis, classification. The main methods of diagnosing chronic gastritis: endoscopic, morphological, detection of Helicobacter pylori infection. Secretory function assessment. The leading morphological signs of chronic gastritis: the degree of inflammation, the activity of gastritis, the degree of atrophy and intestinal metaplasia, the density of Helicobacter pylori contamination. Treatment of Helicobacter pylori-associated gastritis (Maastricht Consensus), other types of gastritis.

Gastroduodenal ulcers: definition, prevalence, etiology, pathogenesis, factors of aggression and protection of the gastric mucosa, clinical manifestations depending on the localization of the ulcer. Instrumental diagnostics of gastroduodenal ulcers: endoscopic and X-ray method, histological examination, tests for the detection of Helicobacter pylori. Differential diagnosis of gastroduodenal ulcers. Complications of gastroduodenal ulcers: bleeding, perforation, penetration, perivisceritis, pyloric stenosis, malignancy. Tactics of a general practitioner in identifying complications of gastroduodenal ulcers. Treatment of uncomplicated ulcers: diet, Helicobacter pylori eradication, antisecretory therapy, symptomatic drugs, gastroprotective agents. Duration of basic therapy depending on the localization of the ulcer. Methods of secondary prevention of gastroduodenal ulcers: continuous maintenance "on demand". Indications for surgical treatment of gastroduodenal ulcers.

Symptomatic ulcers: definition, NSAID-gastropathy, mechanisms of formation of symptomatic ulcers, endoscopic characteristics, clinical manifestations, risk factors for bleeding, treatment, prevention.

Palliative care for patients with oncological diseases of the gastroduodenal region.

2. Functional biliary disorders. Chronic pancreatitis.

Functional biliary disorders: definition, causes of development, pathogenesis, classification, clinical manifestations. Diagnostic criteria, diagnosis and treatment of functional disorder of the gallbladder, biliary and pancreatic disorder of the sphincter of Oddi.

Chronic pancreatitis: definition, etiological factors, pathogenesis, classification, clinical picture, criteria for the severity of chronic pancreatitis. Laboratory and instrumental methods for diagnosing chronic pancreatitis: dynamics of enzymes (β-amylase, lipase, elastase), scatological examination, ultrasound, endoscopic ultrasonography, fibrogastroduodenoscopy, CT, magnetic resonance cholangiopancreatography. Diagnostic criteria for chronic pancreatitis, differential diagnosis. Complications of chronic pancreatitis. Treatment of chronic pancreatitis: diet, medication (relief of

pain, compensation of exocrine insufficiency, correction of nutritional status disorders), indications for surgical treatment.

3. Chronic hepatitis. Metabolic liver diseases. Functional hyperbilirubinemia.

Chronic hepatitis: definition, epidemiology, etiology, pathogenesis (depending on etiological factors), classification. Biochemical markers of cytolytic syndrome, cholestasis, hepatocellular failure, mesenchymal-inflammatory syndrome. Criteria for the activity of chronic hepatitis: clinical, biochemical, morphological.

Autoimmune hepatitis: definition, prevalence, etiology (genetic and trigger factors), pathogenesis (defects in immunoregulation, main autoantibodies and target organs), main clinical manifestations (hepatic and extrahepatic), diagnosis, prognosis. Chronic viral hepatitis: clinical features depending on the viral infection (B, C, E), verification of viral hepatitis, complications, prognosis, primary prevention, vaccination.

Chronic medicinal hepatitis: prevalence, drugs that cause hepatitis, mechanisms of direct cytotoxic effects of drug metabolites on the liver, clinical, biochemical, serological, morphological manifestations, prognosis. Cryptogenic hepatitis: definition, differential diagnosis. Hepatitis treatment: diet, indications for the use of antiviral drugs, corticosteroids, immunosuppressive drugs, hepatoprotectors, extracorporeal therapy methods.

Metabolic liver diseases: fatty liver disease: alcoholic and non-alcoholic fatty liver disease (steatosis and steatohepatitis). Etiology, pathogenesis, clinical manifestations, diagnosis, treatment of metabolic liver diseases. Hereditary pigmented hepatoses (Gilbert, Dabin-Johnson, Rotor syndrome): clinical manifestations, diagnosis, treatment, prognosis.

4. Liver cirrhosis. Hereditary liver diseases.

Cirrhosis of the liver: definition, epidemiology, etiology, pathogenesis, classification, severity classes. Clinical manifestations of viral, alcoholic, primary and secondary biliary cirrhosis of the liver. Diagnosis of cirrhosis of the liver: transient liver elastography, liver biopsy, assessment of portal hypertension. Complications of cirrhosis of the liver: hypersplenism, portal hypertension, bleeding from varicose veins of the esophagus and stomach, portal hypertensive gastropathy and colopathy, ascites, spontaneous bacterial peritonitis, portosystemic encephalopathy, hepatopulmonary syndrome, hepatorenal syndrome. Disorders associated with cirrhosis of the liver: eating disorders, systemic hemodynamic disorders, respiratory system disorders, hemostasis, hepatocellular carcinoma. Differential diagnosis of liver cirrhosis, chronic hepatitis and hepatocarcinoma. Cancer markers.

Principles of liver cirrhosis treatment: general measures, drug treatment and its features in various forms of liver cirrhosis. Treatment of complications of liver cirrhosis. Indications for liver transplantation. Prognosis for cirrhosis of the liver. Prevention of cirrhosis of the liver. Primary biliary cirrhosis of the liver: etiology, pathogenesis, clinical manifestations, diagnosis, treatment.

Hereditary liver diseases (hemochromatosis, primary and secondary iron overload syndrome, Wilson's disease): etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prevention, prognosis.

5. Enteropathy. Irritable bowel syndrome. Inflammatory bowel diseases.

Enteropathies: definition, etiology, pathogenesis, classification, the role of bacterial overgrowth in the intestine, enzymopathies, clinical manifestations. The main syndromes of enteropathy are digestive insufficiency, insufficiency of absorption, exudative enteropathy. Diagnostic

methods of enteropathy (endoscopic, morphological, radiological, functional methods of studying absorption processes), changes in laboratory parameters, differential diagnosis.

Treatment of enteropathy: diet, antibacterial therapy, probiotics and prebiotics, enzyme therapy, regulators of intestinal motor function.

Gluten enteropathy (celiac disease): etiology, pathogenesis, clinical manifestations, diagnosis, treatment, prevention, prognosis.

Irritable bowel syndrome: definition, prevalence, etiology and pathogenesis, pathophysiology. Clinical manifestations and diagnostic (Roman) criteria of the main variants of irritable bowel syndrome: with predominance of constipation, diarrhea, mixed, nonspecific. Treatment of irritable bowel syndrome: diet, effects on the psycho-emotional sphere, relief of pain, correction of impaired intestinal functions.

Inflammatory bowel diseases (IBD). Ulcerative colitis, Crohn's disease: definition, prevalence, etiology and pathogenesis, classification, clinical manifestations, extra-intestinal manifestations. Instrumental diagnostic methods for ulcerative colitis and Crohn's disease: endoscopic, morphological, X-ray, ultrasound. Criteria for the activity of ulcerative colitis and Crohn's disease, complications. Treatment of ulcerative colitis and Crohn's disease: diet, basic (induction and maintenance) therapy depending on the extent and degree of activity (5aminosalicylic acid derivatives, glucocorticoids, immunosuppressants, monoclonal antibodies), symptomatic medications, indications for surgical treatment.

Colitis with a known etiology: ischemic, radiation, antibiotic-associated (pseudomembranous). Rare forms of colitis (microscopic colitis): collagen and lymphocytic.

6. Pneumonia. Suppurative lung diseases. Pleural effusion.

Pneumonia: definition, prevalence, etiology (bacterial, viral, caused by atypical pathogens, fungal pneumonia), predisposing factors, pathogenesis, classification, pathways of pathogen penetration. Clinical manifestations of pneumonia, criteria of severity. Clinical features of the course of pneumonia, depending on the type of pathogen and the state of the immune system. Verification of the causative agent of pneumonia (microbiological, immunological methods). Laboratory, instrumental, and X-ray examination methods for pneumonia. Differential diagnosis of pneumonia. Complications of pneumonia.

Emergency conditions in pneumonia: acute respiratory failure (acute respiratory distress syndrome), acute vascular insufficiency, acute kidney injury, infectious and toxic shock, acute psychosis, DIC syndrome. Treatment of pneumonia: indications for hospitalization, antibacterial therapy, step-by-step antibacterial therapy, criteria for the effectiveness of antibacterial therapy, antiviral drugs, anti-inflammatory drugs, symptomatic treatment. Criteria for recovery and discharge from the hospital. Prognosis and outcomes of pneumonia. Prevention of pneumonia.

Suppurative lung diseases: definition, classification. Acute infectious lesions: abscess and gangrene. Risk factors for the development of suppurative lung diseases. Etiology of lung abscesses and gangrene. Clinical manifestations and diagnosis of acute and chronic lung abscess, mediastinum, and lung gangrene. Differential diagnosis of lung abscess with tuberculous cavities, bronchiectasis, suppurated cysts and hypoplasia, pleural empyema, mycotic suppuration, and cavity cancers. Complications of suppurative lung diseases. Principles of therapeutic methods of treatment of suppurative lung diseases, indications for surgical treatment. Outcome of suppurative lung diseases, prognosis. Prevention of suppurative lung diseases.

Hemoptysis: clinical manifestations, diagnosis, therapeutic diagnostic bronchoscopy, conservative treatment.

Pleural effusion: etiology and pathogenesis. Clinical and laboratory signs of exudate and transudate. Classification of pleurisy (dry, exudative, convoluted, meta- and parapneumonic, tumor,

tuberculous, post-traumatic, systemic connective tissue diseases, reactive, with PE). Clinical manifestations, diagnosis, and treatment of pleural effusion. Indications and methods of puncture of the pleural cavity. Laboratory assessment of pleural effusion, differential diagnosis. Complications and outcomes of pleural effusion. Treatment of pleural effusion, indications for surgical treatment. Prevention of pleural effusion.

7. Acute and chronic bronchitis. Chronic obstructive pulmonary disease.

Acute and chronic bronchitis: definition, prevalence, etiology, pathogenesis, clinical manifestations, diagnosis and differential diagnosis, treatment and prevention.

Chronic obstructive pulmonary disease (COPD): definition, epidemiology, risk factors. Pathological processes in COPD. The modern concept of COPD (GOLD), developed by the World Health Organization (WHO). Clinical manifestations and variants of COPD (assessment of the severity of shortness of breath, severity of exacerbation). Extrapulmonary manifestations of COPD. Instrumental research methods for COPD, functional parameters of external respiration at different stages of the disease, differential diagnosis. Complications of COPD. Principles of management of patients with stable course and exacerbation of COPD: bronchodilator therapy (changing doses, multiplicity and methods of taking medications), oxygen therapy, the use of antibacterial therapy for an infectious episode, the use of glucocorticoid drugs, including combinations with long-acting β2-agonists, respiratory support.

8. Bronchial asthma. Bronchiectasis.

Bronchial asthma: definition, etiology, risk factors, pathogenesis, classification (GINA), clinical manifestations. Diagnosis of various forms of asthma: with a predominance of the allergic component, non-allergic, mixed, unspecified. The role of spirometry and peak flowmetry in determining the variability of symptoms and indicators of lung function. Identification of allergies. Asthmatic status: diagnostic criteria, treatment. The tactics of treating patients depend on the severity of asthma at the onset of the disease and on the degree of control over the disease during its development and course (with controlled, partially controlled, uncontrolled asthma). Inhalation therapy of asthma, types of inhalers. Nebulizer therapy for asthma. Prevention of bronchial asthma. Prognosis for bronchial asthma.

Bronchiectasis: definition, etiology, pathogenesis, predisposing factors. Identification of hereditary diseases associated with the formation of bronchiectasis. Clinical manifestations of bronchiectasis. The main diagnostic methods for bronchiectasis are chest X-ray, CT, MRI, bronchoscopy, and bronchography. Complications of bronchiectasis: pulmonary and extrapulmonary. Conservative treatment of bronchiectasis: antibacterial (with suppuration), postural drainage, rehabilitation bronchoscopy, improvement of mucociliary transport, correction of immune disorders, oxygen therapy, physical therapy. Indications for surgical treatment of bronchiectasis. Prognosis for bronchiectasis.