

CONFIRMED

Head of the Internal Diseases Department №2

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**Study agenda for 2023/2024 academic year  
internal medicine for 4th year student  
of the faculty of training for foreign countries**

**1. Acute bronchitis. Chronic bronchitis and chronic obstructive pulmonary disease.**

Acute bronchitis. Definition. Prevalence. Etiology. Pathogenesis. Acute bronchitis. Clinical presentation. Diagnosis. Differential diagnosis. Treatment and prevention. Chronic bronchitis and chronic obstructive pulmonary disease. Definition. Prevalence. Classification. Etiology. Pathogenesis. Mechanisms of obstruction. Risk factors. Clinical presentation and clinical variants. Differential diagnosis. Principles of treatment and prevention. Chronic obstructive pulmonary disease. Functional respiratory parameters at different stages of the disease. Differential diagnosis. Complications. Treatment objectives and staging. Basic therapy: groups of broncholytics. Indications for corticosteroid therapy. Prevention of attacks.

**2. Pneumonia. Pleural effusion. Suppurative lung diseases: Lung abscess, Lung gangrene.**

Pneumonia. Definition. Prevalence. Etiology. Pathogenesis. Ways of penetration of causative agents. Classification. Clinical presentation. Severity criteria. Clinical differences in the course of pneumonia determined by the causative agent and immunity. Pneumonia. Differential diagnosis. Laboratory, instrumental, radiologic findings. Primary and secondary pneumonias. Diagnosis of complications. Pneumonia. Principles of therapy. Indications for hospitalization. Principles of antibacterial therapy. Antiviral medications. Indications for corticosteroid therapy. Symptomatic treatment. Recovery criteria. Prognosis. Outcomes. Pleural effusion. Etiology and pathogenesis. Mechanisms of effusion into pleural cavity. Clinical and laboratory characteristics of exudate and transudate. Classification of pleuritis. Clinical presentation, diagnosis and course of the development. Indications and technique for pleural tap. Laboratory evaluation of the effusion. Differential diagnosis. Complications and outcomes. Treatment. Indications for surgery. Prophylaxis. Suppurative lung diseases. Definition. Classification of suppurative lung diseases. Risk factors for suppurative lung diseases. Mechanism of development of infection. Principles of medicamentous treatment. Indications for operative treatment. Outcomes. Prognosis. Prophylaxis. Clinical presentation and diagnosis of acute and chronic lung abscess. Lung gangrene. Differential diagnosis of lung abscess, tuberculosis cavern, bronchiectasis, purulent cysts and hypoplasias, empyema of pleura, mycotic suppuration, cavitating forms of cancer.

### **3. Bronchial asthma.**

Bronchial asthma. Etiology. Exogenous and endogenous causative factors. Concept of inductors and trigger factors. Role of allergologic evaluation and anti-allergic treatment. Mechanism of the development of asthma attack. Classification. Diagnosis. Algorithm of spirometric evaluation to reveal reversible airway obstruction. Clinical presentation of asthma attack. Severe asthma attack. Complications. Prognosis. Indications for hospitalization. Medicamentous treatment of asthma attack. Bronchial asthma. Long-term control. Treatment of a severe asthma attack. Inhalation therapy. Types of inhalers. Nebulized therapy. Criteria for well-controlled bronchial asthma. Prophylaxis.

### **4. Chronic hepatitis and metabolic liver diseases.**

The causes and mechanisms of liver damage. The classifications of diffuse liver disease. The value of liver biopsy, ultrasound, radionuclide and immunological methods in diagnosis and differential diagnosis of diffuse liver disease. The index value of histological activity of hepatitis and liver fibrosis stage in predicting disease. Biomarkers of liver fibrosis and elastography in the diagnosis of liver fibrosis stages. Chronic viral hepatitis: diagnosis, differential diagnosis and treatment. Autoimmune hepatitis: the principles of diagnosis and treatment. Alcoholic and nonalcoholic fatty liver disease – the principles of diagnosis and treatment. The social significance of diseases associated with alcohol abuse. The principles of diagnosis and treatment. The principle of the laboratory Fovert's syndromes with diffuse liver diseases (cytolysis, mesenchymal-inflammatory, cholestatic, jaundice, hepatocellular failure). Metabolic liver diseases and disorders (Gilbert syndrome and others).

### **5. Liver cirrhosis and hereditary liver diseases.**

Cirrhosis of the liver - definition and classification. Clinical manifestations and complications of liver cirrhosis - a concerted international recommendations on management. The scale of the severity of liver cirrhosis in Child-Pugh-Turcotte. Primary and secondary biliary cirrhosis: etiology, pathogenesis, clinical features, treatment. Emergency conditions in hepatology: bleeding from the varices of the esophagus, stomach and rectum, portosystemic encephalopathy, ascites, peritonitis, hepatorenal syndrome. Diseases caused by congestion of the liver iron, copper (hemochromatosis, Wilson's disease).

### **6. Functional bowel disorders. Enteropathias. Irritable bowel syndrome.**

Enteropathies: definition, etiology, pathogenesis, classification, role of bacterial overgrowth in the intestine, enzymopathies, clinical manifestations. The main syndromes in enteropathy: insufficiency of digestion, insufficiency of absorption, exudative enteropathy. Methods for diagnosing enteropathy (endoscopic, morphological, radiological, functional methods for studying absorption processes), changes in laboratory parameters, differential diagnosis. Treatment of enteropathy: diet, antibiotic

therapy, probiotics and prebiotics, enzyme therapy, regulators of the motor-evacuation function of the intestine.

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

Irritable bowel syndrome: definition, prevalence, etiology and pathogenesis, pathophysiology. Clinical manifestations and diagnostic (Rome) criteria for the main variants of irritable bowel syndrome: with a predominance of constipation, diarrhea, mixed, nonspecific. Treatment of irritable bowel syndrome: diet, impact on the psycho-emotional sphere, relief of pain, correction of impaired bowel functions. Prevention of irritable bowel syndrome in risk groups.

Classification of functional bowel disorders (ICD-X, Rome Consensus). Diagnostic criteria. Epidemiology and causes of functional intestinal disorders. Bristol stool form scale. Irritable bowel syndrome, diagnostic criteria, subtypes. The volume of patient surveys in suspected irritable bowel syndrome. "The symptoms of anxiety." Treatment of irritable bowel syndrome. Principles of diet therapy for functional bowel disorders. Enteropathias (Coeliac disease etc.).

## **7. Chronic non-specific inflammatory bowel diseases.**

Ulcerative colitis, Crohn's disease: definition, prevalence, etiology and pathogenesis, classification, clinical manifestations, extraintestinal manifestations. Instrumental methods for diagnosing ulcerative colitis and Crohn's disease: endoscopic, morphological, radiological, ultrasound. Activity criteria for 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 (5-aminosalicylic acid derivatives, glucocorticoids, immunosuppressants, monoclonal antibodies), symptomatic drugs, indications for surgical treatment. Colitis with known etiology: ischemic, radiation, antibiotic-associated (pseudomembranous). Rare forms of colitis (microscopic colitis): collagenous and lymphocytic.

## **8. Inflammatory diseases of urinary system.**

Etiology of urethritis, cystitis, pyelonephritis. Classification of pyelonephritis (clinical, ICD-X). The clinical picture of pyelonephritis. Diagnostic (general and special urinalysis, determination of bacteriuria, cystochromoscopy. Excretory and retrograde pyelography, radioisotope nephrography, angiography, ultrasound and radionuclide renal scan). Treatment of pyelonephritis: the regime, diet, antibiotics and uroseptics, indications for surgical treatment. Clinical supervision and prevention of pyelonephritis. Current views on the etiology and pathogenesis of glomerulonephritis. The classification of glomerulonephritis (including morphological forms, the ICD-X). The clinical picture of glomerulonephritis (major clinical syndromes, clinical forms and variants of the course). Clinical examination of patients with glomerulonephritis. Primary and

secondary prevention. Principles of treatment of glomerulonephritis: treatment, diet, etiological treatment, glucocorticoids, immunosuppressants, antiplatelet agents, anticoagulants and other medications, symptomatic therapy, treatment of complications. Outcomes. Forecast.

### **9. Acute kidney injury. Chronic kidney disease.**

Acute kidney injury- definitions, classification. Definitions, staging of chronic kidney disease. The etiology and pathogenesis of chronic renal failure. The main clinical symptoms of chronic renal failure. Stages of the course and classification. Treatment of chronic renal failure (mode, diet, water-salt regime, the correction of acidosis, detoxification therapy, the possibility of | symptomatic treatment). Hemodialysis and peritoneal dialysis. Transplantation of kidneys.