

VOLGOGRAD STATE
MEDICAL UNIVERSITY
Department of Pathological Anatomy

Questions for the final lesson on the topics:

«Bacterial bronchopneumonia. Lobar pneumonia. Lungs obstructive and restrictive disease. Cancer of lungs. Diseases of the stomach and intestines, Diseases of the liver, biliary tract and exocrine part of the pancreas, Diseases of the endocrine system, Diseases of the kidney»

1. Bacterial bronchopneumonia. Lobar pneumonia. Lungs obstructive and restrictive disease. Cancer of lungs.

Acute inflammatory diseases of bronchi.

Acute bronchitis. Reasons and mechanism of the development. Classification. Morphological characteristics.

Acute inflammatory diseases of lungs (acute pneumonia). Classification, its principles.

Interstitial pneumonia. Etiology, pathogenesis, morphological characteristics, outcomes.

Acute destructive processes in lungs. Abscesses, gangrene. Pathogenesis, morphology.

Non-specific chronic diseases of the lungs. Notion. Classification, obstructive and non obstructive chronic diseases of the lungs. Chronic bronchitis, bronchial asthma, chronic abscess, interstitial disease of the lungs, pneumosclerosis. Etiology, pathogenesis. Pathological anatomy of the nosological forms. Chronic pulmonary heart. Reasons of death. Pneumoconiosis (refer to. Professional diseases).

Cancer of lungs. Frequency of occurrence, etiology, pathogenesis. Precancerous conditions. Clinicomorphological characteristics. The morphology of central and peripheral cancer of lungs, the nature of growing, complications. Anatomical and histological forms. Regularity of metastasis.

Plevritis. Causes, mechanism of development, morphology, outcomes.

2. Diseases of the digestive system

Diseases of the mucous membranes and soft tissues of the oral cavity. Inflammatory diseases. Etiology and pathogenesis. Herpes simplex virus (HSV) infections. Glossitis. Stomatitis. Xerostomia. Etiology, pathogenesis. Classifications. Morphological characteristics, clinical manifestations.

Diseases of the dentition. Diseases of the hard tissues of the tooth. Caries. Epidemiology, etiology, pathogenesis, stages, morphological characteristics, complications. Non-cariou lesions. Fluorosis: epidemiology, etiology, morphogenesis, morphological characteristics. Pulp and periodontal disease. Classification. Pulpitis, periodontitis, gingivitis, periodontitis, periodontal disease. Etiology, morphogenesis, morphological characteristics, Clinical manifestations, complications, outcomes. Diseases of the jaw. Inflammatory diseases (osteomyelitis), jaw bone cysts, tumor-like diseases and tumors. Epidemiology, etiology, patho- and morphogenesis, clinical and morphological characteristics, complications, outcomes, prognosis.

Diseases of the salivary glands. Inflammatory and tumor lesions of the salivary glands. Sialadenitis, sialolithiasis: etiology, pathogenesis, morphology, outcomes. Benign and malignant tumors, tumor-like diseases. Classification, morphological characteristics, clinical manifestations, complications, prognosis.

Esophageal disease. Congenital diseases. Anatomical abnormalities (atresia, fistula, stenosis, congenital membranes and rings). The clinic is a morphological characteristic. Diseases associated with impaired motor function of the esophagus. Achalasia. Chi-hernial hernia. Diverticulums of the esophagus (congenital and acquired). Ruptures of the mucous membrane of the esophagus (Mello-ri-Weiss syndrome). Varicose veins of the esophagus. Esophagitis. Barrett's esophagus. Etiology, patho- and morphogenesis, clinical and morphological characteristics, complications, outcomes. Tumors of the esophagus. Benign tumors: classification. Malignant tumors. Esophageal carcinoma. Epidemiology, classification, morphogenesis, morphological characteristics, complications, outcomes, prognosis.

Stomach disease. Congenital malformations of the stomach. Diaphragmatic hernia. Pyloric stenosis (congenital, acquired). Clinical and morphological characteristics. Gastritis. Definition Acute gastritis. Etiology, pathogenesis, morphological forms. Clinical and morphological characteristics. Chronic gastritis, the essence of the process. Etiology, pathogenesis. The principles of classification. Forms isolated on the basis of the study of gastrobiopsies, morphological characteristics. Complications, outcomes, prognosis. Chronic gastritis as a precancerous condition.

Peptic ulcer. Definition General characteristics of peptic (chronic) ulcers of different localizations. Epidemiology, etiology, patho- and morphogenesis, its features in pyloric-duodenal and medio-gastric ulcers. Morphological characteristics of chronic ulcers during exacerbation and remission. Complications, outcomes. Acute gastric ulcers: etiology, pathogenesis, morphological characteristics, outcomes.

Tumors of the stomach. Classification. Hyperplastic polyps. Adenoma of the stomach. Morphological characteristics. Malignant tumors of the stomach. Stomach cancer. Epidemiology,

etiology, principles of classification. Features of metastasis. Macroscopic and histological forms.

Diseases of the small and large intestine. Bowel disease. Congenital malformations of the intestine. Atresia and stenosis. Meckel's diverticulum. Hirschsprung's disease. Etiology, clinical and morphological characteristics.

Vascular bowel disease. Coronary bowel disease. Intestinal infarcts. Angiodysplasia. Hemorrhoidal nodes. Epidemiology, etiology, pathogenesis, clinical and morphological characteristics, complications, outcomes.

Enterocolitis. Diarrhea syndrome: definition, main types, causes. Infectious enterocolitis. Necrotizing entero-colitis. Colitis associated with antibiotic therapy (pseudomembranous, drug colitis). Etiology, pathogenesis, clinical and morphological characteristics, prognosis.

Malabsorption syndromes. Pathogenesis and causes of malabsorption syndromes, clinical syndromes. The role of the morphological study of biostat in the diagnosis of intestinal diseases. Diseases with malabsorption syndrome having a specific morphological characteristic: classification, histological signs.

Idiopathic inflammatory bowel disease. Nonspecific ulcerative colitis. Crohn's disease. Epidemiology, etiology, patho- and morphogenesis, morphological characteristics, clinical manifestations, complications, outcomes, prognosis. Criteria for the differential diagnosis of chronic colitis.

Diverticulosis and intestinal malaise. Diverticula: definition, epidemiology, etiology, pathogenesis, morphological characteristics. Diverticulosis: clinical manifestations, outcomes, prognosis. Intestinal obstruction: causes (heart attack, hernia, adhesions, intussusception, intestinal inversion), clinical and morphological characteristics, medical tactics.

Tumors of the small and large intestine. Epidemiology, nomenclature. Pretumor diseases, non-tumor formations. Gy-perplastic polyps. Epidemiology, etiology, clinical and morphological characteristics, prognosis. Epithelial tumors. Benign tumors. Adenomas: epidemiology, classification, clinical and morphological characteristics, prognosis. Family adenomatous polyposis. Adenoma and cancer: the concept of multi-stage carcinogenesis in the colon. Colon cancer. Epidemiology, etiology, classification, macro- and microscopic morphological characteristics, clinical manifestations, prognosis. Tumors of the small intestine: classification, clinical and morphological features. Carcinoid tumors: classification, histogenesis, morphological characteristics, clinical syndromes, complications, prognosis. Lymphomas of the gastrointestinal tract. Epidemiology, morphological features, complications, prognosis.

Diseases of the appendix of the cecum. Appendicitis. Classification, epidemiology, etiology, pathogenesis. Morphological characteristics and clinical manifestations of acute and chronic appendicitis. Complications. Features of the disease in children and the elderly. Tumors of the appendix. Classification, clinical and morphological characteristics, prognosis.

Diseases of the peritoneum. Peritonitis. Etiology, pathogenesis, classification, clinical and morphological characteristics, outcomes. Primary and secondary tumors of the peritoneum. Morphological characteristics.

3. Diseases of the liver, gall bladder, bile ducts and pancreas.

Causes and mechanisms of the development of liver diseases. The most important causes of liver disease. Impaired liver function: clinical syndromes, biochemical signs. The importance of biopsy in the diagnosis of liver disease. Jaundice. Classification, causes and mechanisms of jaundice. Cholestasis.

Diseases of the liver associated with circulatory disorders. Blockage of the hepatic artery. Obstruction of the portal vein. Blocked hepatic veins (Budd-Chiari syndrome). Etiology, pathogenesis, clinical and morphological characteristics. Circulatory damage to the liver of systemic origin. Venous congestion (clary liver). Pathogenesis, clinical and morphological characteristics, outcomes.

Hepatitis: definition, classification. Acute viral hepatitis. Epidemiology, etiology, transmission routes of infection, patho- and morphogenesis, clinical and morphological forms, morphological characteristics, viral markers, outcomes. Clinical and bio-chemical signs of acute hepatitis. Chronic hepatitis. Etiology, morphological characteristics and classification, signs of activity, outcomes, prognosis. The main clinical manifestations. Viral hepatitis and cirrhosis.

Alcoholic lesions of the liver. Alcoholic obesity of the liver. Alcoholic hepatitis. Alcoholic cirrhosis of the liver. Epidemiology, patho- and morphogenesis, morphological characteristics,

clinical manifestations, complications and causes of death, outcomes, prognosis.

Cirrhosis of the liver. Pathomorphological signs and morphological classification of cirrhosis. Etiological classification of cirrhosis. Clinical and morphological characteristics of the most important types of cirrhosis. Alcoholic cirrhosis. Cirrhosis after viral hepatitis. Biliary cirrhosis (primary, secondary).

The most important complications of portal hypertension and liver (hepatocellular) failure. Portal Hypertension Syndrome. Acute and chronic hepatocellular insufficiency. Hepatic encephalopathy. Jaundice. Renal failure. Ascites and swelling. Endocrine Disorders Circulatory disorders and infectious complications. Pathogenesis, clinical and morphological characteristics.

Infectious diseases of the liver of non-viral etiology. Bacterial, spirochetal and parasitic infections. Ascending cholangitis. Parasitic infestations. Abscesses of the liver. Opisthorchiasis. Epidemiology, patho- and morphogenesis, morphological characteristics, clinical manifestations, outcomes, causes of death.

Tumors of the liver. Classification, epidemiology. Benign neoplasms. Hepatocellular adenoma. Adenoma of the intrahepatic bile ducts. Hemangioma. Morphological characteristics. Malignant neoplasms. Classification. Hepatocellular adenocarcinoma. Epidemiology, etiology. Classification depending on macro- and microscopic features. Complications. Patterns of metastasis. Cholangiocellular cancer. Hepatoblastoma. Hemangiosarcoma. Epidemiology, etiology, morphological characteristics, clinical manifestations, complications, prognosis. Secondary metastatic lesions of the liver.

Gall bladder and bile ducts. Gallstone disease (cholelithiasis). Etiology, pathogenesis, types of stones. Cholecystitis. Definition Acute and chronic cholecystitis. Etiology, pathogenesis, clinical and morphological characteristics, complications, causes of death. Tumors and congenital malformations of the biliary tract. Classification. Clinical and morphological characteristics.

Diseases of the exocrine pancreas. Acute pancreatitis (pancreatic necrosis) and chronic. Epidemiology, etiology, pathogenesis, morphological characteristics, Clinical manifestations, complications and causes of death. Tumors of the exocrine pancreas. Cystadenoma. Pancreas cancer. Epidemiology, classification, morphological characteristics, prognosis.

4. Diseases of the kidneys and urinary tract. Diseases of the male reproductive system.

The role of biopsy and modern methods of morphological research in the diagnosis of kidney disease. Modern clinical and morphological classification of kidney diseases. Congenital malformations. Classification. Agenesis, renal hypoplasia. Ectopic kidneys. Horseshoe kidney. Clinical and morphological characteristics. Cystic kidney disease. Classification, morphological characteristics.

Glomerular kidney disease Glomerulonephritis. Modern classification, etiology, pathogenesis, immunomorphological characteristics. Acute glomerulonephritis. Post-streptococcal and non-streptococcal glomerulonephritis. Rapidly progressive glomerulonephritis. Etiology, pathogenesis, morphological characteristics, complications outcomes.

Nephrotic syndrome. Classification, pathogenesis, signs, clinical and morphological variants. Membranous nephropathy. Lipoid nephrosis. Focal segmental glomerulosclerosis. Pathogenesis, morphological characteristics. Membrane-proliferative glomerulonephritis. Classification, pathogenesis, morphological characteristics. IgA nephropathy. Focal proliferative and necrotizing glomerulonephritis. Pathogenesis, morphological characteristics.

Chronic glomerulonephritis. Definition, macro and microscopic characteristics. Uremia. Etiology, pathogenesis, morphological characteristics. Renal glomerular damage associated with systemic diseases. Systemic lupus erythematosus. Purple by Shenlein-Genoch. Bacterial endocarditis. Pathogenesis, morphological characteristics.

Hereditary Jade. Epidemiology, classification, pathogenesis, morphological characteristics.

Kidney disease associated with tubular lesion and interstitium. Classification. Acute tubular necrosis (necrotic nephrosis). Etiology, pathogenesis, morphological characteristics, clinical manifestations, prognosis. Tubulointerstitial nephritis. Classification, etiology, morphological characteristics, clinical manifestations, outcome.

Pyelonephritis and urinary tract infections. Definition, classification. Etiological and predisposing factor, the spread of infection in the kidneys. Acute pyelonephritis. Definition, etiology, predisposing diseases and pathogenesis, morphological characteristics, complications. Chronic pyelonephritis and reflux nephropathy. Etiology, pathogenesis, morphological variants and

morphological characteristics, clinical manifestations, outcomes.

Tubulo-interstitial nephritis caused by drugs and toxins. Analgesic nephropathy. Epidemiology, etiology, pathogenesis, morphological characteristics.

Uratic nephropathy. Classification. Acute urate nephropathy. Chronic urate (gouty) nephropathy. Nephrolithiasis. Patho- and morphogenesis, morphological characteristics, clinical manifestations, outcomes. Hypercalcemia and nephrocalcinosis. Causes of hypercalcemia. Nephrocalcinosis: pathogenesis, clinical and morphological characteristics. Urinary obstruction (obstructive uropathy). Reasons, clinical and morphological characteristics. Hydronephrosis. Urolithiasis (check stones). Epidemiology, types of stones, stone formation mechanisms. Morphological characteristics. Clinical manifestations.

Tumors of the kidneys, classification. Benign tumors: classification, clinical and morphological characteristics, prognosis. Malignant tumors (renal cell carcinoma, urothelial carcinomas). Classification, epidemiology, predisposing factors, morphological characteristics, features of metastasis, clinical manifestations, prognosis.

Diseases of the ureters. Classification. Congenital malformations of the ureters. Ureteritis. Tumors and tumor-like diseases. Clinical and morphological characteristics.

Bladder disease Classification. Epidemiology. Congenital and acquired abnormalities: morphogenesis, clinical and morphological characteristics. Inflammatory diseases. Acute and chronic cystitis. Interstitial cystitis.

Bladder tumors. Classification. Benign transitional cell tumors (papillomas). Morphological characteristics, forecast. Malignant tumors from the epithelium. Transitional cell carcinoma. Squamous cell carcinoma. Adenocarcinoma. Classification, epidemiology, risk factors, carcinogenesis mechanisms, morphogenesis, clinical and morphological characteristics, prognosis. Mesenchymal tumors. Secondary tumor lesions.

Bladder neck obstruction: causes, clinical and morphological characteristics.

Diseases of the urethra. Classification. Inflammatory diseases (urethritis, urethral carbuncles). Etiology, clinical and morphological characteristics. Tumors of the urethra (papillomas, carcinoma). Clinical and morphological characteristics, prognosis.

Male reproductive system diseases

Diseases of the male penis. Inflammatory diseases. Phimosis. Tumors of the male penis (benign, malignant). Cancer in place, invasive cancer. Classification, epidemiology, morphogenesis, morphological characteristics, prognosis.

Diseases of the prostate gland. Prostate Disease: Classification. Inflammatory diseases. Prostatitis: acute bacterial, chronic. Etiology, morphogenesis, morphological characteristics, clinical manifestations, complications, outcomes. Benign nodular prostatic hyperplasia. Prostate cancer Classification. Epidemiology, causes and risk factors, patho- and morphogenesis, morphological characteristics, developmental stages, molecular markers, clinical manifestations, complications, outcomes.

Diseases of the testicles and epididymis Congenital malformations and regressive changes (cryptorchidism, atrophy): clinical and morphological characteristics. Inflammatory diseases. Orchitis, epididymitis: etiology, clinical and morphological characteristics, prognosis. Autoimmune orchitis. Orchitis with gonorrhea, mumps, tuberculosis, syphilis: clinical and morphological manifestations. Vascular disease of the testicles. Reasons, morphological characteristics. Tumors of the testicles. Classification, epidemiology, risk factors, tumor markers and diagnostic methods. Germ cell tumors. Seminomas, embryonic cancer, choriocarcinoma, teratoma. Classification, clinical and morphological characteristics, prognosis.

List of recommended literature:

Basic literature:

1. “Basic pathology” Vinay Kumar, Ramzi S. Cotran, Stanley L. Robbins, 1997.

Additional literature:

1. “Pathology. Quick Review and MCQs” Harsh Mohan, 2004.
2. “Textbook of Pathology ” Harsh Mohan, 2002.
3. “General and Systemic Pathology” Joseph Hunter, 2002.
4. “General and Systematic Pathology ” Ed. J.C.E. Underwood – Edinburgh: Churchill Livingstone, 1996 (2th).
5. “Histology for Pathologist” Ed. S.S.Sternberg – Philadelphia: Lippincott Raven Publ, 1997 (2th).
6. “Histopathology. A Color Atlas and Textbook” Damjanov I., McCue P.A. – Baltimore, Philadelphia, London, Paris etc.: Williams and Wilkins, A Waverly Co., 1996.
7. “Muir’s Textbook of Pathology” Eds. R.N.M. MacSween, K. Whaley London: ELBS, 1994 (14th).
8. “Pathology” Eds. Rubin, J.L. Farber – Philadelphia: Lippincott Raven Publ, 1998 (3th).
9. “Pathology Illustrated” Govan A.D.T., Macfarlane P.S., Callander R. – Edinburgh: Churchill Livingstone, 1995 (4th).
10. “Robbins Pathologic Basic of Disease” Eds. R.S.Cotran, V.Kumar, T.Collins – Philadelphia, London, Toronto, Montreal, Sydney, Tokyo: W.B.Saunders Co., 1998 (6th).
11. “Wheater’s Basic Histopathology. A Color Atlas and Text” Burkitt H.G., Stevens A.J.S.L., Young B. – Edinburgh: Churchill Livingstone, 1996 (3th).
12. “Color Atlas of Anatomical Pathology” Cooke R.A., Steward B. – Edinburgh: Churchill Livingstone, 1995 (10th).
13. “General Pathology ” Walter J.B., Talbot I.C. – Edinburgh: Churchill Livingstone, 1996(7th).
14. “Concise Pathology” Parakrama Chandrasoma, Glive R. Taylor.
15. “Pathology” Virginia A. LiVolsi, Maria J. Merino, John S. J. Brooks, Scott H. Saul, John E. Tomaszewski, 1994.
16. “Short lectures on pathology” Zagoroulko A., 2002
17. “Robbins pathologic basis of diseases” Cotran R., Kumar V., Collins T.
18. “General pathology” Dr. Fatma Hafez, 1979.
19. “Anderson’s Pathology ” Damjanov I., Linder J. – St. Louis: Mosby Inc., 1995 (10th).

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