

VOLGOGRAD STATE
MEDICAL UNIVERSITY
Department of Pathological Anatomy

Questions for the final lesson on the topics:

Endocrine diseases. Diseases of the male and female reproductive systems.

1. Endocrine diseases

Diseases of the pituitary gland. Classification. Local changes in lesions of the adenohypophysis. Hyperpituitarism: causes. Adenomas and carcinomas of the adenohypophysis. Morphological characteristics, clinical syndromes. Hypopituitarism: causes. Non-secretive adenomas, pituitary necrosis (Sheehan syndrome), empty Turkish saddle syndrome. Suprasellar tumors of the hypothalamus (craniopharyngioma). Clinical and morphological characteristics. Syndrome of the posterior pituitary gland. Causes, clinical manifestations.

Thyroid disease. Thyroid Disease: Classification. Goiter - definition, state of function of the gland. Thyrotoxicosis (hyperthyroidism). Definition, causes, clinical manifestations. Graves' disease (diffuse toxic goiter, Basedova disease): pathogenesis, morphological features of the thyroid gland, pathology of internal organs.

Gynothyroidism. Causes, clinical manifestations. Primary idiopathic hypothyroidism. Cretinism. Myxedema. Pathogenesis, morphological characteristics, clinical manifestations.

Thyroiditis. Definition, classification. Hashimoto's thyroiditis, subacute granulomatous, subacute lymphocytic, fibrous (Ridel). Etiology, pathogenesis, morphological characteristics, clinical manifestations, outcome. Purulent (infectious) thyroiditis. Etiology, clinical manifestations.

Diffuse and nodular goiter. Pathogenesis, functional state of the gland. Diffuse non-toxic (simple) goiter: endemic, sporadic. Multinodular goiter. Epidemiology, etiology, patho- and morphogenesis, morphological characteristics, clinical manifestations, complications, outcomes.

Thyroid tumors. Epidemiology, classification. Benign tumors. Adenomas: classification, morphological characteristics, prognosis. Malignant tumors. Thyroid cancer. Classification, epidemiology, features of patho- and morphogenesis, prognosis. Morphological features of papillary, follicular, anaplastic, medullary cancer.

Diseases of the parathyroid glands. Diseases: classification. Primary hyperparathyroidism. Causes. Adenomas. Primary hyperplasia. Carcinoma. Clinical and morphological features. Secondary hyperparathyroidism. Causes, association with kidney disease. Morphological characteristics, clinical manifestations. Hypercalcemia: causes, clinical significance.

Diseases of the adrenal cortex. Hyperfunction of the adrenal cortex (hyperadrenalism): Cushing's syndrome, hyperaldosteronism, adrenogenital syndromes. Causes, pathogenesis, morphological characteristics of the adrenal glands, clinical manifestations, prognosis, treatment principles. Hypofunction of the adrenal cortex (hypoadrenalism). Classification (primary and secondary, acute and chronic), causes. Primary chronic insufficiency of adrenal cortex (Addison's disease). The main causes (autoimmune adrenalitis, tuberculous adrenalitis, tumor metastases). Pathogenesis, clinical and morphological characteristics, treatment principles. Secondary insufficiency of the adrenal cortex. Causes, principles of diagnosis, morphological features of the adrenal gland.

Hormonally non-functioning adrenal tumors (adenomas, cancer). Other changes in the cortical substance (cysts, myelolipoma). Morphological features, prognosis.

Diseases of the adrenal medulla. Diseases of the adrenal medulla. Pheochromocytoma. Classification, morphological characteristics (criteria for malignancy), clinical manifestations, changes in internal organs.

Tumors of the extrarenal paraganglia: clinical and morphological characteristics.

Diseases of the endocrine pancreas. Diabetes. Definition, classification. Etiology and pathogenesis of insulin-dependent and non-insulin-dependent diabetes mellitus. Morphological characteristics of diabetes. Metabolic disorders in diabetes. Complications of diabetes mellitus: diabetic angiopathy, nephropathy, retinopathy, neuropathy. Pathogenesis, clinical and morphological characteristics, prognosis. Causes of death in diabetes. Diabetic glomerulosclerosis. Patho- and morphogenesis, classification. Tumors of the endocrine part of the pancreas (islets of Langerhans). Classification, morphological characteristics.

Diffuse and nodular (Kimmelstil-Wilson disease) glomerulosclerosis. Morphological characteristics, clinical manifestations, outcome, causes of death. Amyloidosis of the kidneys. Diagnostic methods, clinical manifestations.

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.

2. Diseases of the female genital organs. Diseases of the mammary glands.

Inflammatory and necrotic diseases of the mammary glands. Mastitis is acute. Breast abscess. Ectasia of the milk ducts. Fatty necrosis of the mammary gland. Etiology, morphological characteristics, complications, outcomes.

Fibrocystic diseases: classification and nomenclature. Cysts and breast fibrosis. Epithelial hyperplasia. Sclerosing adenosis. Tumors of the mammary glands. Classification. Benign neoplasms. Fibroadenoma Phylloid (leaf) tumor. Intraductal papilloma. Morphological characteristics, clinical significance. Malignant neoplasms. Mammary cancer. Epidemiology, risk factors, patho- and morphogenesis, morphological types and morphological characteristics, clinical manifestations. Prognosis and long-term results of treatment.

Diseases of the mammary glands in men. Gynecomastia Cancer of the male mammary glands. Clinical and morphological characteristics.

Female genital diseases

Diseases of the vulva and vagina. Diseases of the vulva and vagina. Classification. Inflammatory diseases, precancerous processes. Etiology, morphological characteristics. Benign and malignant neoplasms. Clinical and morphological characteristics.

Uterine Diseases Diseases of the cervix. Acute and chronic cervicitis. Endocervical polyps. Epidemiology, etiology, risk factors, morphogenesis, morphological characteristics, clinical manifestations, outcomes. Cervical cancer. Epidemiology, risk factors, diagnostic methods, morphogenesis. Cervical intraepithelial neoplasia. Intraepithelial and invasive cervical cancer. Classification, epidemiology, risk factors, morphological characteristics, clinical manifestations, prognosis.

Diseases of the body of the uterus and endometrium. Classification, risk factors. Endometritis is acute and chronic. Etiology, clinical and morphological characteristics. Adenomyosis Endometriosis Morphological characteristics, theories of occurrence, clinical manifestations, clinical significance. Endometrial diseases accompanied by uterine bleeding. Classification. Glandular endometrial hyperplasia. Classification, causes, morphological characteristics, prognosis (risk of malignancy). Tumors of the uterus. Classification. Tumors from the epithelium. Endometrial polyp. Endometrial cancer. Epidemiology, predisposing factors, macroscopic characteristics, histological forms, classification, patterns of metastasis, prognosis. Mixed and mesenchymal tumors. Leiomyoma Morphological characteristics, classification. Leiomyosarcoma. Malignant mixed mesoderm tumors. Endometrial stromal tumors. Clinical and morphological characteristics, prognosis.

Diseases of the fallopian tubes. Diseases of the fallopian tubes. Classification. Inflammatory diseases (salpingitis): etiology, morphological characteristics, clinical significance. Tumors: classification, morphological features.

Ovarian disease. Ovarian cysts. Classification. Follicular cysts, cysts of the corpus luteum. Polycystic Stromal hypertosis. Reasons, morphological characteristics, clinical significance. Ovarian tumors. Risk factors. Classification. Features of histogenesis. Benign and malignant tumors from the superficial epithelium, from germ and germ cells (germ cells), from ovarian stroma (stroma of the genital cord). Ovarian cancer: morphological characteristics, prognosis. Metastatic

ovarian lesions (Krukenberg tumor).

Pathology of pregnancy and the postpartum period. Pre- and postnatal disorders, diseases of infancy and childhood. The endometrium and the ovum during uterine pregnancy, its violation and ectopic pregnancy.

Pathology of the placenta: classification. Infectious processes in the placenta. Ways of infection of the placenta and the fetus. Etiology, morphological manifestations, effects on the fetus and the body of a woman, outcomes. Anomalies of the placental disc, localization and attachment of the placenta. Classification, morphological features, clinical significance. Circulatory disorders. Etiology, features of morphogenesis, clinical significance.

Pathology of pregnancy. Spontaneous abortions. Epidemiology, causes, features of morphological research. Ectopic pregnancy. Classification, causes, morphological diagnosis, complications and outcomes. Causes of death.

Toxicosis of pregnant women (gestosis). Classification, epidemiology. Clinical manifestations, causes, pathogenesis, morphological characteristics. Causes of death of a woman, the effect on the fetus.

Trophoblastic disease. Classification. Bubble skid, invasive cystic skid, choriocarcinoma.

Trophoblastic tumor of the placental bed. Epidemiology, morphological characteristics, clinical manifestations, prognosis. Choriocarcinoma: features of histogenesis, morphological characteristics, prognosis.

Perinatal pathology. Fetal growth retardation. Reasons, clinical and morphological characteristics, prognosis.

Birth injury and birth injury. Birth injury: predisposing factors, classification. Birth tumor.

Kefalogematoma. Skull bone injury. Epidural hemorrhages. Subdural hemorrhages. Birth injury to the spine, peripheral nerves. Clavicle fracture. Morphological characteristics, clinical manifestations, prognosis.

Birth damage to hypoxic origin. Pathogenesis, classification. Subcapsular hematomas of the liver. Adrenal hemorrhage. Subarachnoid hemorrhages in the brain and spinal cord. Hypoxic damage to the central nervous system: classification, pathogenesis, morphological characteristics, clinical significance.

Diseases of the lungs of the perinatal period (pneumonia). Classification, clinical manifestations, risk factors. Pathogenesis.

Primary atelectasis. Hyaline membrane disease. Pulmonary edema and hemorrhage. Syndrome of massive aspiration of amniotic fluid and meconium. Bronchopulmonary dysplasia. Morphological characteristics, complications, clinical significance.

Congenital malformations. Frequency, classification, etiology, pathogenesis. Chromosomal and gene diseases. Defects of multifactorial etiology. Defects due to the action of teratogens. The mechanisms of teratogenesis.

Intrauterine infections. Ways of infection of the fetus: Ascending infection of the fetus.

Hematogenous infection. Etiology, morphological characteristics, clinical manifestations.

Diseases of the central and peripheral nervous system. Cerebral infarction (stroke). Intracranial hemorrhage.

Infectious and parasitic diseases. Tuberculosis. Syphilis. Sepsis. Air-respiratory infections: SARS, influenza, parainfluenza, adenovirus infection, diphtheria, measles, scarlet fever, whooping cough, meningococcal infection. Intestinal infections: cholera, typhoid, salmonellosis, dysentery, amoebiasis. Viral infections: herpes, cytomegalovirus, HIV infection. Echinococcosis.

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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