

Questions for the examination of the pathology Dental medicine

1.

- a) Basic methods in pathology practice (division of biopsy, cytology, histochemistry, immunohistochemistry, electron microscopy and immunofluorescence), special methods in pathology practice.
- b) Neuropathology (ischaemic brain damage, encephalomalacia, intracranial haemorrhage, brain and spinal cord concussion, diffuse axonal injury).
- c) Pre-malignant lesions other than leukoplakia (erythroplasia of Queyrat, Bowen's disease, keratoma senile, cornu cutaneum, xeroderma pigmentosum, Peutz-Jeghers's syndrome, acanthosis nigricans, lentigo maligna).

2.

- a) Thanatology (definition of death, categories of death, agonia, atria mortis).
- b) Neuropathology (multiple sclerosis, Alzheimer's disease, parkinsonism, tumours of the nervous system - astrocytoma, oligodendroglioma, ependymoma, glioblastoma multiforme, meningioma, neurilemmoma).
- c) Discoloration of the dental hard tissues, oral manifestations of occupational diseases (caused by metals, acids and bases, industrial dust).

3.

- a) Thanatology (virtual death, clinical death and biological death, postmortal changes, moment of death).
- b) Pathology of the liver (developmental abnormalities of the bile ducts, jaundice, neonatal jaundice, Reye's syndrome, hepatic failure, circulatory disturbances, tumours).
- c) Pathology of the temporomandibular joint (infective arthritis, rheumatoid arthritis, osteoarthritis, traumatic injury, pain-dysfunction syndrome).

4.

- a) Inflammation (cellular events in inflammation, mediators of inflammation, regulation of inflammation).
- b) Diseases of the small intestine (Crohn's disease, ulcerative colitis, malabsorption syndrome, celiac disease, non-celiac gluten sensitivity, tumours of the small intestine).
- c) Systemic and metabolic bone diseases (achondroplasia, dysostosis cleidocranialis, osteogenesis imperfecta, osteopetrosis, osteodysplasia fibrosa, M. Paget).

5.

a) Derangements of homeostasis (disturbances of body fluids and electrolytes, pathogenesis and morphology of important types of oedema).

b) Musculoskeletal system diseases (osteonecrosis, osteoporosis, gouty arthritis, myasthenia gravis, muscular denervation atrophy, myopathies).

c) Oral manifestations of systemic diseases (endocrine disorders, metabolic disorders, blood and hematopoietic system diseases).

6.

a) Etiology and pathogenesis of reversible and irreversible cell injury (intracellular acidosis, damage to membrane pumps, cytoskeletal injury, free radical-mediated injury).

b) Pneumopathology (paediatric lung diseases, sudden infant death syndrome, ARDS, atelectasis and collapse of the lungs, pulmonary arterial hypertension).

c) Odontogenic tumours (dentinoma, odontoma, cementoma, melanotic neuro-ectodermal tumour).

7.

a) Dystrophy (hydropic change, hyaline change, mucoid change, disorders of saccharide, lipid and protein metabolism).

b) Diseases and tumours of the pituitary gland, diseases and tumours of the adrenal gland.

c) Odontogenic tumours (ameloblastoma, adenoameloblastoma, ameloblastic fibroma).

8.

a) Disorders of pigment metabolism (pathology of endogenous and exogenous pigments).

b) Dermatopathology (genetic dermatoses - ichthyosis, keratosis palmaris et plantaris, Darier's disease, non-infectious inflammatory dermatoses - eczema, urticaria, acne vulgaris, infectious dermatoses - impetigo, warts, molluscum contagiosum, scaling dermatoses - psoriasis).

c) Benign tumours of salivary glands (pleomorphic adenoma, monomorphic adenomas).

9.

a) Morphology of irreversible cell injury (autolysis, necrosis, apoptosis).

b) Pathology of the kidney (acute glomerulonephritis, extracapillary glomerulonephritis, minimal change disease, membranous, mesangial and membrano-proliferative glomerulonephritis, glomerulosclerosis, Berger's disease, lupus nephritis, diabetic nephropathy).

c) Squamous cell carcinoma, basal cell carcinoma, pigmented naevi, malignant melanoma.

10.

- a) Morphology of irreversible cell injury (gangrene, calcification).
- b) Pathology of the kidney (tubular and tubulointerstitial diseases, acute and chronic pyelonephritis, renal vascular diseases, nephrosclerosis, nephrolithiasis, hydronephrosis).
- c) Mesenchymal tumours of the blood and lymphatic vessels, cartilage and bone.

11.

- a) Cellular adaptations (atrophy, hypertrophy, hyperplasia, metaplasia, dysplasia).
- b) Pathology of the gall bladder and pancreas (congenital anomalies, cholelithiasis, cholecystitis, pancreatitis, tumours).
- c) Epidermoid cyst, dermoid cyst, atheroma, bone cysts, developmental soft tissue cysts.

12.

- a) Immunopathology, diseases of immunity (AIDS, HIV infection, hypersensitivity reactions).
- b) Non-neoplastic disorders of the breast and breast tumours.
- c) Malignant tumours of salivary glands (adenoid cystic carcinoma, mucoepidermoid carcinoma, acinic cell carcinoma).

13.

- a) Amyloidosis (pathogenesis and classification, systemic and localised amyloidosis).
- b) Tumours of the testis and penis, phimosis, orchitis and epididymitis.
- c) Sialolithiasis, sialadenitis (parotitis epidemica, acute non-specific, chronic fibrosing).

14.

- a) Derangements of homeostasis (acid-base imbalance).
- b) Endocarditis, myocarditis, cardiomyopathies, pericardial diseases, tumours of the heart.
- c) Mesenchymal tumours of fibrous, adipose and muscular tissue.

15.

- a) Haemodynamic derangements (hyperaemia, congestion, chronic venous congestion, haemorrhage).
- b) Classification of heart diseases (congenital heart disease, acute heart failure, cardiac hypertrophy and dilatation).

c) Autoimmune diseases (scleroderma, polyarteritis nodosa, Wegener's granulomatosis)

16.

a) Shock (definition, classification, etiology, pathogenesis, stages, morphologic features, clinical features and complications).

b) Tumours of the kidney, urinary bladder and prostate, inflammations of the ureter, urinary bladder and prostate.

c) Odontogenic and retention cysts.

17.

a) Circulatory disturbances - thrombosis (pathology of endothelial injury, role of platelets, haemocoagulation disorders, morphologic features of individual types of thrombi, fate of thrombus).

b) Pathology of the kidney (congenital anomalies, acute and chronic renal failure, clinicopathologic classification of glomerulonephritides, immunologic and non-immunologic mechanisms)

c) Sialosis, xerostomia, Mikulicz's disease, Sjogren's syndrome.

18.

a) Circulatory disturbances – embolism (etiopathogenesis, systemic and pulmonary thromboembolism, types of embolism).

b) Diseases of the esophagus (muscular dysfunctions, haematemesis, varices, GERD, Barret's esophagus, tumours of the esophagus).

c) Leukoplakia.

19.

a) Circulatory disturbances – ischaemia (etiology, infarction, morphology of infarct).

b) Pneumopathology (classification of pneumonias, bacterial pneumonia, mycoplasmal pneumonia, pneumocystis and legionella pneumonia, aspiration and hypostatic pneumonia, lipid pneumonia).

c) Autoimmune diseases (lupus erythematosus, dermatomyositis)

20.

a) Inflammation (definition, types of inflammation, classification of inflammation).

b) Diseases of the Fallopian tube and ovary (polycystic ovary disease, ovarian tumours, Krukenberg's tumour, salpingitis, Fallopian tube empyema).

c) Gingival hyperplasia, epulides.

21.

a) Inflammation (forms of acute inflammation, systemic effects of acute inflammation, morphologic signs of acute inflammation).

b) Diseases of the vulva, vagina and cervix of uterus (vulvovaginitis, vulval leukoplakia, cervicitis, squamous intraepithelial lesion of the ectocervix, carcinoma in situ and invasive carcinoma of the cervix of uterus).

c) Granulomatous inflammation (sarcoidosis and actinomycosis).

22.

a) Inflammation (forms of chronic inflammation, systemic effects of chronic inflammation, morphologic signs of chronic inflammation).

b) Diseases of the uterus (dysfunctional bleeding, endometrial hyperplasia, endometritis, myometritis, endometriosis, tumours of the endometrium and myometrium).

c) Stomatitis of unknown origin (aphthae, Mikulicz's aphthae, erythema multiforme, pemphigus vulgaris, benign mucosal pemphigoid, pemphigus senilis, lichen ruber planus).

23.

a) Exudative type of inflammation (types, serous inflammation of serous membranes, mucous membrane, skin and interstitium, purulent inflammation of serous membranes, mucous membrane, skin and interstitium, fibrinous croupous, diphtheric, escharotic and gangrenous inflammation).

b) Diseases of the small intestine (congenital anomalies, obstruction, ischaemic enterocolitis, necrotizing enterocolitis, infectious enterocolitis).

c) Granulomatous inflammation (tuberculosis, syphilis).

24.

a) Alterative type of inflammation (parenchymatous inflammations – diphtheric myocarditis, infectious hepatitis, kuru, encephalitis), proliferative type of inflammation, complications of different types of inflammation.

b) Pathology of the liver (hepatitis, etiopathogenesis, classification, acute and chronic hepatitis, complications, cirrhosis and its complications, portal hypertension).

c) Periodontitis (etiology, pathogenesis, acute, chronic, classification, manifestations, complications).

25.

a) Specific type of inflammation (tuberculosis and leprosy).

b) Tumours of lymphoid series (ALL, CLL, Hodgkin's disease, NHL, follicular and Burkitt's lymphoma, mycosis fungoides, Sézary syndrome).

c) Gingivitis (acute, chronic, ulcerative), parodontal diseases (etiology, pathogenesis, classification, manifestations, complications).

26.

a) Regeneration and reparation (molecular and cellular factors, morphologic signs, wound healing, complications of wound healing, fracture healing, healing of nervous tissue, muscle, mucosal surfaces and parenchymatous organs).

b) Diseases of the large intestine (congenital malformations, diverticulosis, ischaemic colitis, other types of colitis, haemorrhoids, polyps and tumours).

c) Development of teeth and oral cavity.

27.

a) Infectious diseases (plague, anthrax, pertussis, granuloma inguinale).

b) Pathology of leucocytes and lymphatic tissue (leukaemias, myeloproliferative neoplasms, myelodysplastic syndrome, plasmacytoma, Waldenström's macroglobulinaemia, histiocytosis).

c) Osteomyelitis (etiology, pathogenesis, acute, chronic, classification, manifestations, complications).

28.

a) Infectious diseases (staphylococci, streptococci, clostridial infections).

b) Ischaemic heart disease (coronary atherosclerosis, angina pectoris, acute myocardial infarction).

c) Stomatitis caused by viruses (herpetic gingivostomatitis, herpes simplex, varicella, herpes zoster, herpangina, hand-foot-mouth disease, morbilli, stomatitis epizootica).

29.

a) Infectious diseases (haemorrhagic fever, yellow fever, dengue fever, influenza).

b) Tumours of orofacial region and neck (eye and orbit, tumours of the ear, nose and paranasal sinuses, tumours of the pharynx and larynx).

c) Stomatitis caused by bacteria (scarlatina, anguli infectiosi, necrotizing gingivostomatitis, gangrenous stomatitis).

30.

a) Infectious diseases (lymphogranuloma venereum, cat-scratch disease, rabies).

b) Diseases and tumours of the thyroid gland, parathyroid gland disorders and tumours, diabetes mellitus.

c) Anomalies of the tongue, glossitis.

31.

a) Parasitic diseases (amoebiasis, malaria, cysticercosis, filariasis and TORCH complex perinatal infections).

b) Enlargement of lymph nodes, non-neoplastic lymphadenopathies.

c) Disturbances in structure of teeth - disturbances in structure of cementum, hypercementosis, cementicles, pulp calcifications, denticles, enameloma.

32.

a) Neoplastic disease (nomenclature, classification, characteristics, categories, features: clinical, macroscopic and microscopic, N/C ratio, mitotic activity index, tumour angiogenesis and stroma).

b) Neuropathology (developmental anomalies, hydrocephalus, meningitis, bacterial encephalitis, viral encephalitis).

c) Dental caries (etiology, pathogenesis, classification, enamel caries, dentine caries, cementum caries, manifestations, complications).

33.

a) Neoplastic disease (invasion, spread, grading and staging of cancer, predisposition, precancerosis, paraneoplastic syndrome).

b) Diseases of arteries and veins (morphologic features, atherosclerosis, medial calcinosis, arteritis, aneurysms, phlebothrombosis and thrombophlebitis, lymphedema).

c) Stomatitis caused by mechanical, physical and chemical factors, stomatitis in allergy, stomatitis caused by fungi.

34.

a) Neoplastic disease (carcinogens and carcinogenesis, growth promoting oncogenes, growth suppressing oncogenes, genes regulating apoptosis, clinical aspects of neoplasia, tumour antigens).

b) Pathology of haematopoietic system (haemorrhagic diatheses, disorders of platelet functions, DIC, haemolytic disease of newborn).

c) Pulpitis (etiology, pathogenesis, acute, chronic, classification, manifestations, complications).

35.

- a) Neoplastic disease (mesenchymal and epithelial tumours).
- b) Pathology of haematopoietic system (classification of anaemias, iron deficiency anaemia, anaemia of chronic disease, megaloblastic anaemia, pernicious anaemia, haemolytic anaemias, aplastic anaemia).
- c) Disturbances in structure of teeth - disturbances in structure of dentine (dentinogenesis imperfecta).

36.

- a) Neoplastic disease (neuroectodermal tumours, mixed tumours and choriocarcinoma).
- b) Hypertensive heart disease, cor pulmonale, valvular heart diseases and deformities.
- c) Atrophy, acanthosis, acantholysis, spongiosis, vacuolar degeneration, keratosis, hyperkeratosis, parakeratosis, hyperparakeratosis, dyskeratosis.

37.

- a) Environmental diseases (tobacco smoking, alcoholism, drug abuse, CO poisoning).
- b) Pneumopathology (abscess, chronic bronchitis, emphysema, bronchial asthma, restrictive pulmonary disease, pneumoconioses, interstitial lung disease).
- c) Disturbances in structure of teeth - disturbances in structure of enamel (amelogenesis imperfecta).

38.

- a) Environmental diseases (injury by excessive heat and cold, radiation, atmospheric pressure, chemical agents in the air).
- b) Pathology of pregnancy (placental abnormalities, mole, choriocarcinoma, feto-placental unit disorders, spontaneous abortion, termination of pregnancy, ectopic pregnancy, gestosis, puerperal sepsis).
- c) Anomalies in number, size, form of teeth and teeth eruption.

39.

- a) Nutritional diseases (obesity, starvation, diseases resulting from vitamin deficiency and excess).
- b) Tumours of lungs, diseases and tumours of the pleura.
- c) Facial clefts (etiology, pathogenesis, classification, morphology, consequences), m.Fordyce.

40.

a) Genetic diseases (errors in morphogenesis, chromosomal abnormalities, Mendelian disorders, inborn errors of metabolism).

b) Diseases of the stomach (gastritis, peptic ulcer, haematemesis, tumours).

c) Acquired non-bacterial changes of the dental hard tissues (attrition, abrasion, erosion, resorption), sclerosis of dentine, secondary dentine.