

Clinical pathomorphology testing.

1. What do we call a transformation zone:

- a. Unstable cervical area where metaplasia occurs +
- b. The area of transformation of squamous epithelium into endocervical epithelium
- c. The invasive zone characterized by the disintegration of the basement membrane by atypical epithelial cells
- d. The entire cervical area between the uterine body and the vagina
- e. Exocervical epithelium with dysplastic cells

2. The frequent cause in the genesis of cervical cancer is:

- a. Premalignant lesion caused by Human Papilloma virus (HPV) +
- b. Sclero-atrophic lesion
- c. The chronic inflammatory process
- d. Mesonephric duct reminiscences
- e. Cervical endometriosis

3. Severe cervical intraepithelial lesion (CIN) involves:

- a. Abnormal cells that pass through the basement membrane into the underlying stroma to a depth of > 5mm
- b. Total intraepithelial immaturity with marked cellular atypia, increased mitotic index throughout the epithelial thickness, crypt colonization +
- c. Severe intraepithelial dysplasia without glandular involvement
- d. Frequent clinic, manifested early, expressed by abnormal vaginal bleeding
- e. Glandular intraepithelial metaplasia

4. Characteristics of the transformation zone:

- a. Cervical area where squamous cell metaplasia occurs +
- b. This is an unstable area where cervical intraepithelial neoplasia (CIN) and cancer usually occur +
- c. The entire area must be sampled when an LLETZ or conization cervical biopsy is taken +
- d. The area of transformation of squamous cell epithelium into endocervical epithelium
- e. Endocervical dysplastic area

5. Characteristics of cervical cancer:

- a. A frequent factor of cervical carcinogenesis is the sclero-atrophic lesion
- b. Most common cancer in women in developing countries, 2nd most common worldwide +
- c. Squamous cell carcinoma represents 60-80% of all primary cancers of the cervix +
- d. Premalignant cervical lesions may take years to develop invasive carcinoma +
- e. Squamous cell carcinoma represents 20-30% of all primary cervical cancers

6. Endocervical glandular dysplasia (CGIN):

- a. Shows areas of atypical glandular epithelium with partial stratification, moderate nuclear atypia +
- b. Multiple mitoses located at the epithelial surface +
- c. Noninvasive, stratified, neoplastic nests with a mucin-producing component
- d. Immunohistochemistry reveals an increased Ki-67 proliferation index, and focal immunoreactivity for p16 +
- e. Lympho-vascular invasion occurs early

7. List the phases of the menstrual cycle:

- a. Menstrual/hemorrhagic phase +
- b. Regenerative/restorative phase
- c. Proliferative/estrogenic phase +
- d. Secretory/progesterone phase +
- e. Excretory/progesterone phase

8. Pathognomonic sign in the clinic of the patient with endometrial cancer:

- a. Dyspareunia
- b. Pelvic projection discomfort and heaviness
- c. Abnormal vaginal bleeding +
- d. Dysuria
- e. Melena

9. Which of the following endometrial lesions is associated with the highest risk of developing endometrial carcinoma:

- a. Chronic endometritis
- b. Complex atypical hyperplasia +
- c. Complex hyperplasia
- d. Simple hyperplasia
- e. Squamous metaplasia

10. Cervical carcinoma usually develops at the junction between:

- a. Ectocervix and endocervix +
- b. Endocervix and endometrium
- c. Superficial and deep endocervical glands
- d. Vagina and cervix
- e. Cervix and paracervical tissue

11. Which of the following hormones can cause endometrial carcinoma:

- a. Estrogen +
- b. Progesterone
- c. Human chorionic gonadotropin

- c. Human chorionic gonadotropin
- d. Luteinizing hormone
- e. Testosterone

12. The most common histological variant of endometrial carcinoma:

- a. Mucinous adenocarcinoma
- b. Serous adenocarcinoma
- c. Clear cell adenocarcinoma
- d. Endometrioid adenocarcinoma +
- e. Granular cell adenocarcinoma

13. Characteristics of endometrioid endometrial adenocarcinoma:

- a. Atypical cells are larger than those of the endometrium in the proliferative phase, round nuclei with variable nuclear pleomorphism and prominent nucleoli +
- b. This is the most common histological type, accounting for almost 80% of all endometrial carcinomas +
- c. Endometrioid endometrial adenocarcinoma by definition is carcinoma with a low degree of differentiation
- d. Endometrioid endometrial carcinoma comprises a spectrum of neoplasms with variable histological differentiation, ranging from well to poorly differentiated +
- e. The common cause is infection with the Human Papillomavirus (HPV)

14. A satisfactory conventional cervical smear should contain at least:

- a. 5,000 squamous cells fixed and visualized
- b. 15,000 squamous cells fixed and visualized
- c. 8,000 squamous cells fixed and visualized +
- d. 30,000 squamous cells fixed and visualized
- e. 20,000 squamous cells fixed and visualized

15. Which of the following are NOT associated with empty nuclei:

- a. Atrophy
- b. LSIL +
- c. HSIL
- d. Cytolysis
- e. All of the listed

16. From what age should the presence of endometrial cells in cervical smear be reported:

- a. ≥ 30 years
- b. ≥ 25 years
- c. ≥ 45 years +
- d. ≥ 40 years
- e. ≥ 60 years

17. Which of the following devices for cervical smear sampling have been approved by the Primary Health Care service in the Republic of Moldova:

- a. Endocervical brush
- b. Cervex brush +
- c. Combi brush
- d. Brush with extended tip
- e. All of the listed

18. Indicate the reasons why you do NOT take a Pap smear:

- a. If the woman shows obvious signs of vaginal/cervical infection
- b. Post-menopausal period with severe cervical atrophy
- c. During menstruation
- d. Women after total hysterectomy in the absence of abnormal cytology in the antecedents
- e. All of the above +

19. The Papanicolaou smear is frequently used to detect early cellular dysplasia in the tissue sample from:

- a. Vagina
- b. Uterine cervix +
- c. Uterine body
- d. Fallopian tubes
- e. Ovaries

20. Definition of neuroendocrine tumors:

- a. Benign tumors of epithelial origin
- b. Malignant tumors of mesenchymal origin
- c. Malignant tumors originating from neuroendocrine cells of the APUD system +
- d. Lymphoid tumors
- e. Melanocytic malignant tumors

21. Neuroendocrine cells are:

- a. Enterochromaffin +
- b. G cells +
- c. M cells

a. D cells +

e. L cells +

22. The most informative method of diagnosing neuroendocrine tumors is:

a. Histological

b. Cytological

c. Immunofluorescent

d. Immunohistochemistry +

e. Immunological

23. Which immunohistochemical markers are necessary to establish the diagnosis of neuroendocrine tumor:

a. Vimentina

b. Synaptophysin +

c. Chromogranin +

d. PCK

e. Ki67

24. To assess the degree of severity, we use the marker:

a. Ki67 +

b. Synaptophysin

c. Chromogranin

d. NSE

e. CD56

25. The differential diagnosis of neuroendocrine tumors is made with:

a. Small cell carcinoma +

b. Papilloma

c. Lymphoma +

d. Melanoma +

e. Lipoma

26. Exfoliative cytology represents:

a. FNA

b. Cells or fluids are sampled directly +

c. Sampling cells from the surface of the body

d. Sampling of cells during operations

e. Endoscopic cell sampling

27. It is not always possible in cytopathology:

a. To locate the neoplastic lesion

b. Distinguish between specific and non-specific inflammation

c. Distinguishes preinvasive from invasive cancer +

d. Distinguish between dysplastic and neoplastic changes

e. Distinguish neoplasia from specific inflammation

28. The cytopathological methods are:

a. Laparoscopic

b. Exfoliative +

c. Abrasive +

d. FNA +

e. Transcutaneous

29. The types of cytological staining are:

a. Papanicolaou +

b. Zeihl-Neelsen

c. Congo red

d. Hematoxylin and eosin

e. Romanowsky +

30. Romanowsky staining is used:

a. For fixed dishes

b. For air-dried dishes +

c. For dishes dried in the sun

d. For dry dishes in the water bath

e. For dried dishes in the refrigerator

31. How to decipher FNAB:

a. Fine needle aspiration cytology

b. Fine needle aspiration biopsy +

c. Fine needle absorbed cytology

d. Absorbent biopsy with thick needle

e. Cytology of very dark liquids

32. Exfoliative cytology is used to analyze:

- a. Urine +
- b. Sputum +
- c. Washing from the mucous or serous levels
- d. Fusions in body cavities +
- e. Cerebrospinal fluid +

33. Abrasive cytology is used for:

- a. Fingerprints +
- b. Scraping +
- c. Buffer +
- d. Nodules and deep organs
- e. Nodules and superficial organs

34. FNA is used for:

- a. Nodules and superficial organs easily scored +
- b. Pleural fluids
- c. Urine
- d. Abdominal fluids
- e. Sputum

35. FNA is used for:

- a. Exudates
- b. Transudates
- c. Nodules and deep organs +
- d. Urine
- e. sputum

36. Dyskaryosis means: CS

- a. Abnormal nucleus +
- b. Abnormal cytoplasm
- c. Abnormal cell function
- d. Abnormal cell position
- e. Abnormal cell size

37. Which immunohistochemical markers are used to diagnose GISTs:

- a. CD 34 +
- b. CD 117 +
- c. CD 10
- d. CD 56
- e. Chromogranin A

38. Characteristics of pancreatic pseudopapillary solid neoplasm:

- a. Microvascular pseudo-papillae +
- b. Cystic structures
- c. Prominent nucleoli and mitotic activity
- d. Patients are usually elderly and male
- e. Patients are usually young and female +

39. Which immunohistochemical marker is used to diagnose pancreatic pseudopapillary solid neoplasm:

- a. DC 10 +
- b. Chymotrypsin
- c. GPC-3 (glypican)
- d. HepPar-1(EYE5)
- e. PR +

40. Which histochemical staining is used in the diagnosis of gastric signet ring cell adenocarcinoma:

- a. Alcian blue +
- b. Congo ed
- c. Giemsa
- d. Sudan III
- e. Alcian ed

41. The most common location of GISTs:

- a. Stomach +
- b. Small intestine
- v. Colon
- d. Rect
- e. Esophagus

42. Differential diagnosis of pancreatic pseudopapillary solid neoplasm:

- a. Pancreatic acinar carcinoma +
- b. Pancreatic neuroendocrine tumor +
- c. Pancreatic pseudocyst +
- d. GIST

e. Pancreatic ductal carcinoma

43. Which immunohistochemical marker is used to diagnose GISTs: CS

- a. Arginase-1
- b. CD 117(c-Kit) +
- c. GPC-3 (glypican)
- d. HepPar-1(EYE5)
- e. SMA (smooth muscle actin)

44. Histological characteristics of GISTs:

- a. Well-differentiated smooth muscle cells
- b. Perinuclear vacuolation +
- c. Spindle cells with prominent nucleoli +
- d. Spindle and epithelioid cells
- e. Marked atypia

45. Differential diagnosis of GISTs:

- a. Leiomyoma +
- b. Leiomyosarcoma +
- c. Peptic ulcer
- d. Carcinoid tumor
- e. Menetrier disease

46. Which immunohistochemical markers are used to diagnose pancreatic pseudopapillary solid neoplasm:

- a. DC 10 +
- b. PR (progesterone receptor) +
- c. CD 56 +
- d. Chromogranin A
- e. Synaptophysin

47. What is characteristic for immunohistochemistry:

- a. Ag-Ab specific reaction +
- b. It is applied in the diagnosis of tumor histogenesis +
- c. It is applied in the differential diagnosis +
- d. It should always be applied to confirm the diagnosis
- e. Refers to the process of detecting + antigens

48. What is the most common form of melanoma:

- a. Superficial melanoma +
- b. Nodular melanoma
- c. Malignant lentigo
- d. Acral lentiginous melanoma
- e. Nevoid melanoma

49. What is squamous cell carcinoma:

- a. Locally invasive malignant tumor with the ability to metastasize +
- b. Appears on the parts of the skin exposed to the sun, especially in blondes +
- c. It is most often located on the face, preferentially on the lower lip +
- d. The pathogenesis of this tumor is NOT associated with UV exposure
- e. Histologically, the tumor consists of malignant mesenchymal cells

50. What is basal cell carcinoma:

- a. The most common malignant skin tumor +
- b. Locally invasive tumor, practically never metastasizes +
- c. It is typically located on skin areas exposed to the sun and thus has a pathogenetic connection with exposure of the skin to UV rays +
- d. It most frequently appears on the trunk
- e. Tumor cells do NOT invade the dermis

51. How are melanocytic nevi classified histologically:

- a. Junctional nevus. Nevi cells are located at the boundary between epidermis and dermis +
- b. Complex nevus. Nevi cells are located at the level of the dermo-epidermal junction and at the level of the reticular layer of the dermis +
- c. Intradermal nevus. Nevi cells are located in the deep layers of the dermis without junctional activity +
- d. Dysplastic nevus. Nevi cells are located in the deep layers of the dermis without junctional activity
- e. Compound nevus - Nevi cells are located at the boundary between epidermis and dermis

52. What is the histological staging of malignant melanomas:

- a. According to the Clark system +
- b. According to the Breslow system +
- c. According to the Gleason system
- d. According to the Merkel system
- e. According to the Langhans system

53. How does melanoma appear:

- a. 50% of melanomas appear on the background of acquired melanocytic nevi +
- b. 40% develop from normal skin melanocytes +
- c. Atypical nevi have the highest risk for malignant transformation +

- d. They often appear from small congenital nevi
- e. Large congenital nevi give rise to melanomas in approximately 30% of cases

54. Macroscopic characteristics of nodular hyperplasia of the prostate:

- a. The prostate is enlarged, nodular, densely elastic, with a mass exceeding 2 times the normal +
- b. The nodules that appear in the periurethral portion compress the peripheral portions +
- c. The compressed peripheral portion forms the surgical capsule +
- d. The urethra is not compressed
- e. The peripheral portion can protrude into the urinary bladder acting as a valve

55. Microscopic characteristics of nodular hyperplasia of the prostate:

- a. Hyperplastic glands are lined with columnar or cubical epithelium, which often protrudes into the lumen +
- b. The structure of the glands is preserved, they being composed of 2 layers +
- c. The stroma contains hyperplastic smooth muscle cells and fibroblasts +
- d. Glands are atrophic lined with columnar epithelium
- e. The stroma is desmoplastic

56. What pathological changes occur as a result of urinary flow obstruction by the hyperplastic prostate:

- a. Compressed and deformed urethra+
- b. Urinary bladder dilated and hypertrophied +
- c. Prostatitis and orchiepididymitis +
- d. Hydrocele
- e. Prostate carcinoma

57. What are the clinical signs of benign prostatic hyperplasia:

- a. Dysuria - frequent urination, weak pulsating stream, incomplete emptying of the bladder +
- b. Bladder infection - cystitis +
- c. Dysfunction of the urinary tract due to obstruction of the flow of urine +
- d. Sterility
- e. Hematuria +

58. What is the frequency of prostate carcinoma:

- a. It is the most common tumor in men +
- b. As a cause of death from cancer, it ranks 2nd after lung carcinoma +
- c. As a cause of death from cancer, it ranks 1st
- d. It is the rarest tumor in males
- e. As a cause of death from cancer, it ranks 3rd

59. What is characteristic of prostate carcinoma:

- a. The disease of old age. The incidence increases proportionally with age +
- b. Race and family predisposition are considered risk factors +
- c. Hormones play a role. Prostate carcinomas do not appear in castrated persons until puberty +
- d. Prostate-specific antigen (PSA) is not used for tumor screening and monitoring
- e. Race and family predisposition are NOT considered risk factors

60. What is characteristic of prostate carcinoma:

- a. Multifocal induration most often in the external areas of the posterior lobe (can be palpated by rectal palpation) +
- b. Histologically, the tumor represents adenocarcinoma with desmoplastic stroma +
- c. The tumor has a tendency to invade nerves, seminal vesicles and adjacent pelvic organs (bladder and rectum) +
- d. Metastases in regional lymph nodes and bones are rare
- e. The presence of metastases is NOT associated with an increase in the serum level of alkaline phosphatase

61. What is the essence of the Gleason classification:

- a. Gleason grading is used to grade prostatic carcinoma +
- b. Low-grade tumors have a relatively favorable prognosis +
- c. High-grade tumors are lethal in all cases +
- d. High-grade tumors have a relatively favorable prognosis
- e. The Gleason classification is used to grade seminomas

62. What are occult prostate carcinomas:

- a. Prostatic carcinomas that have no clinical expression +
- b. They are detected as microscopic lesions following autopsy or during biopsy +
- c. Such occult carcinomas are detected histologically in 30% of men aged 50 and in 70% of those over 80 +
- d. It is associated with acute urinary retention
- e. Such occult carcinomas are detected histologically in 70% of men aged 50 and in 30% of those over 80

63. What are the most useful diagnostic techniques for prostate carcinoma:

- a. Biopsy. It is easy to perform and allows establishing the final diagnosis +
- b. Ultrasonography. This method is useful for detecting suspicious indurated areas +
- c. Biopsy under USG guidance is less accurate than usual biopsy
- d. Computed tomography is useful for measuring the extent of the cancerous process and for staging prostate cancer +
- e. PSA measurement is NOT useful for screening within risk groups

64. What is the prognosis for prostate cancer:

- a. The prognosis depends on the stage and grade of the tumor +
- b. Low-grade, localized tumors are associated with a favorable prognosis (95% survival over 10 years) +
- c. High-grade tumors with extension to adjacent tissues are associated with a 5-year survival rate equal to 50% +

d. High-grade tumors with distant metastases, including bone ones, are associated with an unfavorable prognosis and a life expectancy of 2-3 years +

e. Low-grade, localized tumors are associated with poor prognosis (10% 5-year survival)

65. What is prostate resection:

a. Benign prostatic hyperplasia can be treated by transurethral resection +

b. Radical prostatectomy is useful for the treatment of prostate cancer +

c. Benign prostatic hyperplasia is treated by radical prostatectomy

d. Transurethral resection is useful for the treatment of prostate cancer

e. Prostate cancer is not treated surgically

66. What are the consequences of prostatectomy:

a. The most frequent complications are incontinence and erectile dysfunction +

b. As a result of radical prostatectomy in the case of prostate cancer, only 5% of patients retain normal sexual function +

c. Signs of urinary incontinence appear in 15-20% of patients +

d. As a result of radical prostatectomy in the case of prostate cancer, sexual function is not affected

e. Prostatectomy has no consequences

67. For the intestinal histological subtype in Carcinoma of the Ampulla of Vater, the expression is determined the following markers:

a. CDX2, MUC2 +

b. MUC1, CK7

c. CK7, MUC1

d. MUC1, MUC6

e. Calretinin

68. According to location, Ampullary carcinomas are classified into:

a. Periampullary/IntraAmpullary +

b. Carcinoma NOS +

c. Intrahepatic

d. Ductal ampullary carcinoma +

e. Pancreas tail

69. The prevalence of Ampulla Vater carcinomas is more common in:

a. female gender, after 25 years

b. male gender, average age being 60-70 years.

c. female gender, average age 35-55 years +

d. male gender, average age 18-33 years

e. male gender, average age 25-45 years

70. Predisposing factors in the development of Ampullary Carcinomas can be:

a. Hereditary conditions such as, familial polyposis +

b. Lynch syndrome +

c. Peutz-Jeghers syndrome +

d. Hypoestrogenism

e. Exposure to biliary and pancreatic products +

71. Ampullary carcinoma, pancreatobiliary histological type, presents the following histological criteria:

a. The presence of Goblet, Paneth cells

b. Atypical glandular structures with ductal appearance, separated by desmoplastic reaction +

c. Atypical glandular structures, tubular appearance

d. Columnar, stratified epithelium and elongated nuclei

e. Unstratified cuboidal epithelium, with pleomorphism marked +

72. Against the background of intraampullary papillary-tubular neoplasm (IAP), the following develops:

a. Mucinous adenocarcinoma

b. Malignant tumor of the pancreas head

c. Hyperplastic polyp

d. Ampullary carcinoma +

e. Neuroendocrine tumor