

# Questions for Oncology examination for students of the IV year, Faculty of Medicine no. 1, No. 2.

1. The founding Background of oncological service in the Republic of Moldova. Staff training in oncology. The foundation and history of the Oncology, Hematology and Radiation Department.

- 2. The infrastructure of oncology service in Republic of Moldova.
- 3. Clinical groups in oncopathology and medical tactics.
- 4. Epidemiologic and geographical beatures of malignant tumors in the Republic of Moldova.
- 5. Risk factors in oncogenesis.
- 6. Cancer fighting program in the Republic of Moldova.
- 7. Principles of malignant tumors classification according to TNM staging.
- 8. Principles of early cancer detection.
- 9. Methods of treatment in oncology.
- 10. Rehabilitation of oncological patients.
- 11. Principles of palliative treatment of oncology patients.
- 12. The role of Hospice in the palliative treatment of oncology patients.
- 13. Primary, secondary and tertiary prophylaxis of malignant tumors.
- 14. Reasons of late stage cancer diagnosis.

#### Skin cancer

- 1. Skin cancer (basal cell, squamous cell). Skin cancer morbidity and mortality.
- 2. Etiopathogenesis of skin cancer.
- 3. Obligated precancerous condition of the skin cancer. Clinical features. Treatment.
- 4. Optional precancerous condition of skin cancer. Clinical features. Treatment.
- 5. Primary and secondary prophylaxis of skin cancer.
- 6. Skin cancers TNM staging.
- 7. Paths of skin cancer progress.
- 8. Unfavorable prognostic factors for skin cancer.
- 9. Basal cell skin cancer (Basal cell carcinoma). Clinical features. Clinical forms.
- 10. Squamous cell skin cancer. Clinical features. Clinical forms.
- 11. Methods of diagnosis of skin cancer.
- 12. Surgical treatment of skin cancer.

13. Surgical treatment of locally-advanced skin cancer. Regional lymph node dissection. Crile operation. Dukene operation.

14. Physical methods of treatment of skin cancer (Cryosurgery, hyperthermia, laser therapy, photodynamic therapy).

15. Radiotherapy treatment of skin cancer. Indications, contraindications.

16. Chemotherapy (topical and systemic use) and immunotherapy of skin cancer.

## Malignant melanoma

1. Cutaneous malignant melanoma. Incidence, mortality.

- 2. Malignant melanoma. Etiology and precancerous conditions. Primary and secondary prophylaxis.
- 3. TNM classification (staging) of cutaneous malignant melanoma.
- 4. Breslow classification and levels of invasion (Clark) of malignant melanoma.
- 5. Clinical signs of malignant cutaneous moles.
- 6. Clinical presentation of cutaneous malignant melanoma. Clinical forms.
- 7. Cutaneous malignant melanoma metastasis paths.
- 8. Unvaroble prognostic factors for cutaneous malignant melanoma.
- 9. Methods of diagnosis of malignant melanoma.
- 10. Surgical treatment of cutaneous malignant melanoma.
- 11. Immunotherapy of cutaneous malignant melanoma.

12. Radio- and chemotherapy in the treatment of cutaneous malignant melanoma.

13. Physical methods of treatment of cutaneous malignant melanoma (cryosurgery, hyperthermia, laser therapy, photodynamic therapy).

14. Prophylactic regional lymph node dissection in the treatment of cutaneous malignant melanoma.

15. Treatment of cutaneous malignant melanoma metastasis. (surgery, chemotherapy, immunotherapy).

## The thyroid gland cancer

- 1. Precancerous condition of the thyroid gland.
- 2. The staging of thyroid cancer according to the TNM system.
- 3. Etiopathogenesis of thyroid cancer.
- 4. Histopathological forms of thyroid cancer.
- 5. Malignisation signs of benign thyroid tumors.
- 6. Thyroid cancer regional metastatic pathways.
- 7. Thyroid cancer clinic and paraclinic diagnostic methods.
- 8. Thyroid cancer tratment according to tumor stage.
- 9. Types of operations in case of thyroid gland cancer surgery.
- 10. Clinical signs of thyroid cancer according to dissemination process.
- 11. Primary and secondary prophylaxis of thyroid cancer.

- 12. Hormonal therapy for thyroid cancer.
- 13. Concept of metabolic radiotherapy.

## Oral cavity mucosa cancer

- 1. Lower lip cancer etiopathogenesis.
- 2. Premalignant diseases of the lower lip.
- 3. TNM classification and staging of oral mucosa cancer.
- 4. Clinical presentation of lower lip cancer.
- 5. Lower lip cancer metastasis pathways.
- 6. Lower lip cancer diagnosis.
- 7. Lower lip cancer radiotherapy.
- 8. Surgical treatment of lower lip cancer.
- 9. Prophylaxis of lower lip cancer.
- 10. Epidemiology of oral cavity mucosa cancer.
- 11. Classification of oral cavity mucosa cancer according to TNM staging.
- 12. Precancerous condition of oral cavity mucosa cancer.
- 13. Clinical presentation of forms (ulcer, nodular, papillary) of oral cavity mucosa cancer.
- 14. Surgical treatment of oral cavity mucosa cancer.
- 15. Combined treatment method of oral cavity mucosa cancer.
- 16. Regional metastasis treatment of cancer of the oral cavity organs.
- 17. Cryotherapy in the oral cavity mucosa cancer. Indications and contraindications.
- 18. Cancer prophylaxy of lower lip and oral cavity mucosa cancers.
- 19. Histopathological classification of cancers of the oral cavity organs.

### Tumors of female reproductive organs

- 1. Incidence and mortality due to breast cancer.
- 2. Breast cancer etiopathogeny.
- 3. Precancerous condition of the mammary gland.
- 4. Mastopathies. Clinical forms. Treatment.
- 5. Clinical evolution of the nodular form of breast cancer.
- 6. Mammary gland benign tumors and their treatment.
- 7. Morphological classification of breast cancer.
- 8. Diagnostic methods of breast cancer.
- 9. Diffused forms of breast cancer. Clinical presentation.
- 10. Paget breast cancer. Clinical manifestations, diagnosis.

- 11. Radiological diagnosis of breast cancer.
- 12. Surgical treatment of breast cancer. (Maden, Patey, Holsted operations).
- 13. The treatment of breast cancer according to the stage of tumor.
- 14. Principles of radiotherapy treatment of breast cancer.
- 15. Complications of breast cancer.
- 16. Chemotherapy of breast cancer.
- 17. Postoperative complications of breast cancer.
- 18. Indications for chemotherapy in breast cancer.
- 19. Combined and complex treatment of breast cancer.
- 20. The differential diagnosis of breast cancer.
- 21. Breast cancer metastatic ways.
- 22. Staging of breast cancer according to the TNM system.
- 23. Incidence and mortality from cervical cancer.
- 24. Ethiopathogenesis of cervical cancer.
- 25. Precancerous states of the cervix. Diagnosis and treatment.
- 26. Clinical manifestations of cervical cancer.
- 27. FIGO / TNM staging of cervical cancer.
- 28. Histological classification and metastatic pathways of cervical cancer.
- 29. Methods of diagnosis of cervical cancer.
- 30. Cervical cancer. Methods and techniques of surgical treatment (Wertheim operation).
- 31. Types of radiant treatment in cervical cancer.
- 32. Chemotherapy of cervical cancer. Combined chemotherapy and monochemotherapy protocols.
- 33. Methods of prophylaxis (screening) and prognosis in cervical cancer.
- 34. Endometrial cancer. Epidemiology, morbidity and mortality. Risk factors. Etiology and pathogenesis.
- 35. Precancerous conditions of the endometrium. Diagnosis and treatment.
- 36. Clinical manifestations of endometrial cancer.
- 37. Endometrial cancer. Morphological forms. FIGO / TNM staging.
- 38. Diagnosis of endometrial cancer.

39. Methods of treatment of endometrial cancer (surgical, radiotherapy, chemotherapy. Hormonal). Principles of selection.

- 40. Prophylaxis and prognosis of endometrial cancer.
- 41. Ovarian cancer. Epidemiology, etiopathogeny and precancerous conditions.

- 42. WHO histopathological classification of ovarian tumors.
- 43. TNM and FIGO staging of ovarian cancer.
- 44. Clinical manifestations of ovarian cancer.
- 45. Diagnosis of ovarian cancer.
- 46. Tumor markers detectable in ovarian cancer (antigenic, enzymatic, hormonal).
- 47. Principles of surgical treatment (primary, palliative, second-look surgery).
- 48. Chemotherapy in ovarian cancer.
- 49. Prophylaxis and prognosis of ovarian cancer.

## Urinary bladder, Kidney cancers

1. Benign kidney tumors. Clinic al picture. Diagnosis and treatment.

2. Kidney cancer (CR). Epidemiology, morbidity and mortality. Etiology and pathogenesis. Morphological forms. Metastasis pathways and growth forms.

3. TNM classification of renal cancer. Clinical presentation. Clinical forms of kidney cancer.

4. Diagnostic methods of kidney cancer: (USG, CT, MRI, angiography, cystoscopy)

5. The differential diagnosis of CR with hydronephrosis, renal cysts, retroperitoneal tumors, benign tumors.

6. Kidney cancer treatment: (surgical, combined and complex). Indications and contraindications.

7. Kidney cancer radiotherapy. The techniques and indications. Early and delayed results of treatment. Reactions and complications.

8. Renal cancer chemotherapy. Indications for treatment. The role of the mono- and poly chemotherapy. Treatment results. Prognostic factors.

9. Hormone therapy and immunotherapy of kidney cancer. Indications. Medicines used.

10. Treatment of renal cancer metastasis (surgery, radiotherapy and chemotherapy).

11. Prognosis of kidney cancer. Key factors. Monitoring of the patient.

12. Prophylaxy of kidney cancer. Primary, secondary and hygienic.

13. Benign tumors of the bladder: clinic al picture, diagnosis and treatment. Prognosis.

14. Bladder cancer. Morbidity and mortality. Premalignant diseases and risk factors.

15. Bladder cancer. Histological structure. TNM staging.

16. Clinical presentation of bladder cancer. Local, local-spread general and metastatic symptoms. Forms of growth.

17. Methods of investigation in bladder cancer. (Radiology. USG. Cystoscopy).

18. Treatment of bladder cancer: surgical, combined, complex. Postoperative complications.

19. Radiotherapy, chemotherapy and immunotherapy of bladder cancer. Complications.

20. Prophylaxy of bladder cancer.

## Cancer of colon and rectum

- 1. Incidence and mortality from malignant colon tumors.
- 2. Incidence and mortality from malignant tumors of rectum.
- 3. Etiopathogenesis of colon and rectum cancers.
- 4. Precancerous conditions of the colon.
- 5. Forms of macroscopic growth of colon cancer.
- 6. The histological classification of malignant tumors of colon.
- 7. Forms of macroscopic growth of rectal cancer.
- 8. The histological classification of malignant tumors of the rectum.
- 9. Clinical forms of colon cancer.
- 10. Clinical manifestations of colon cancer.
- 11. Clinical manifestations of rectal cancer.
- 12. TNM staging of colon cancer.
- 13. Dukes staging of colon cancer.
- 14. The differential diagnosis of the colon cancer.
- 15. Complications of colon cancer operations and their treatment.
- 16. Radiological diagnosis of colon cancer.
- 17. Endoscopic diagnosis of colon cancer.
- 18. Radical surgery for colon cancer.
- 19. Palliative operations used for colon cancer.
- 20. Rectal cancer TNM staging.
- 21. Rectal cancer diagnosis.
- 22. The differential diagnosis of rectal cancer.
- 23. Radical surgery of rectal cancer.
- 24. Palliative operations used for rectal cancer.
- 25. Radiotherapy for rectal cancer.
- 26. Chemotherapy for colon and rectum cancers.

## Lung cancer

- 1. The anatomy of lungs. Morbidity and mortality from lung cancer.
- 2. Etiopathogenesis of lung cancer. (smoking, air pollution, genetic factors, ionizing radiation etc.)
- 3. Precancerous condition of the lungs.
- 4. The histological classification of lung cancer.
- 5. Clinical and anatomical forms of lung cancer (central, peripheral and atypical forms of lung cancer).

- 6. Pathways of lung cancer metastasis (lymphatic and hematogenic, mixed).
- 7. Lung cancer TNM classification.
- 8. The clinical evolution of central lung cancer.
- 9. Clinical manifestations of peripheral lung cancer.
- 10. Clinical evolution of lung cancer with the apical Pancoast -Tobias syndrome.
- 11. Paraneoplastic syndromes of lung cancer (Pierre-Marie-Bamberger syndrome).
- 12. Radiological methods in detecting lung cancer. Radiological signs of central and peripheral lung cancers.
- 13. Brobronhoscopic diagnosis of lung cancer (goal, endoscopic signs of lung cancer).
- 14. Surgical treatment of lung cancer (radical and economic surgery).
- 15. Treatment of lung cancer according to the tumor stage and morphological structure.

# **Esophageal cancer**

- 1. Anatomy and physiology of the esophagus. Epidemiology of esophageal cancer.
- 2. Growth and histological forms of esophageal cancer.
- 3. Progression and metastasis pathways of esophageal cancer.
- 4. Etiopathogenesis of esophageal cancer and precancerous condition of the esophagus.
- 5. The TNM classification of esophageal cancer.
- 6. Clinical evolution of esophageal cancer (local symptoms).
- 7. Clinical signs of harm by oesophageal cancer of adjacent organs.

8. Radiological semiology depending on the forms of oesophageal cancer growth (exophytic, infiltrative and ulcerative).

- 9. Methods of diagnosis of esophageal cancer (fibroesophagogastroscopy, radiological fibrobronchoscopy etc.)
- 10. Surgical treatment of oesophageal cancer (radical and palliative surgery).
- 11. Esophageal Cancer Treatment depending on the affected anatomical sites and tumor stage.

## **Gastric cancer**

- 1. Frequency of gastric cancer depending on the anatomical regions of the stomach.
- 2. Arterial and venous vascularization of the stomach.
- 3. Precancerous conditions of the stomach and their treatment.
- 4. Histological forms of gastric cancer.
- 5. Growth forms of gastric cancer.
- 6. Metastasis pathways of gastric cancer.
- 7. The lymphatic paths metastasis of gastric cancer (stages and lymphatic nodes groups).
- 8. Distant lymphatic metastasis of gastric cancer.

- 9. Metastasis(by implantation) of gastric cancer
- 10. The clinical presentation of proximal gastric cancer.
- 11. Clinical presentation of distal gastric cancer.
- 12. Clinical presentation of gastric body cancer.
- 13. Complications of gastric cancer.
- 14. Methods of diagnosis of gastric cancer.
- 15. Radiological methods in the diagnosis of gastric cancer.
- 16. Endoscopic diagnosis of gastric cancer.
- 17. Differential diagnosis of proximal gastric cancer.
- 18. Classification of gastric cancer according to the TNM system.
- 19. Indications and contraindications for surgery in gastric cancer.
- 20. Types of surgical operations in gastric cancer (depending on the growth forms and localization).
- 21. Palliative surgery in gastric cancer.
- 22. Chemotherapy (neoadjuvant, adjuvant) in gastric cancer.
- 23. Treatment of gastric cancer according to tumor stage and localization.
- 24. Postoperative complications in gastric cancer (precocious and late).
- 25. Preoperative preparation of gastric cancer patients
- 26. Prognosis of gastric cancer.

#### Hepatic cancer

- 1. Anatomy and physiology of the liver.
- 2. Liver precancerous conditions and their treatment.
- 3. Histological forms of liver cancer.
- 4. Growth forms of liver cancer.
- 5. Liver cancer metastatic pathways.
- 6. Classification of liver cancer according to TNM system.
- 7. Clinical presentation of liver cancer.
- 8. Diagnosis of liver cancer.
- 9. Radical surgery in liver cancer.
- 10. Liver cancer chemotherapy.
- 11. The differential diagnosis of liver cancer.
- 12. Prognosis of liver cancer.

## Pancreatoduodenal zone

- 1. Anatomy and physiology of pancreatoduodenal zone.
- 2. Histological forms of pancreatic cancer.
- 3. Forms of growth of pancreatic cancer.
- 4. Klatskin neoplasm and it localization.
- 5. Pathways of cancer metastasis of pancreatoduodenal zone.
- 6. Classification of pancreatic cancer according to TNM system.
- 7. Clinical presentation of pancreatoduodenal zone cancer. The Courvoisier-Terrier sign.
- 8. Pancreatoduodenal zone cancer diagnosis.
- 9. Radiological diagnosis of pancreatoduodenal zone cancer.
- 10. Endoscopic diagnosis of pancreatoduodenal zone cancer.
- 11. Treatment of pancreatic cancer.
- 12. Radical surgery in pancreatic cancer depending on the tumor localization.
- 13. Pancreatoduodenectomy: indications, principle, postoperative complications.
- 14. Chemotherapy and radiotherapy of pancreatic cancer.

Head of Department, Professor, MD Phd

Sofroni Dumitru