1. Etiology and pathogenesis of malignant tumors. The origin theories of malignant tumors.
2. Mechanisms of carcinogenesis. Habitat and carcinogenesis. The internal environment of the body and carcinogenesis.
3. Tumors classification. Stage and clinical group. TNM system.
4. Morbidity and mortality in malignant tumors. Structure of oncological morbidity. The concept of epidemiology of malignant tumors.
5. Modern ideas about premalignant conditions. Dysplasia.
6. The principles of cancer care organization. Russian Federation structure of oncological service.
7. Defining early diagnosis and screening of malignant neoplasms.
8. Prevention of oncological diseases.
9. General principles of the diagnosis of malignant tumors.
10. The role of morphological methods of research in oncology. Material taking methods for cytological and histological studies.
11. Loco-regional methods of treatment of malignant neoplasms.
12. Systemic treatments of malignant neoplasms.
13. The principles of palliative treatment of malignant neoplasms.
14. Deontological approach with cancer patients.
15. Skin cancer. Epidemiology. Etiopathogenetic factors. Precancerous diseases.
16. Skin cancer. Morphology and signs. Diagnosis and treatment.
17. Melanoma. Epidemiology. Risk factors. Pigmentary nevi. Symptoms of malignancy nevi.
18. Melanoma signs, diagnosis and treatment.
19. Thyroid cancer, etiological factors, pathoanatomical characteristics.
20. Thyroid cancer signs and diagnosis.
21. The principles of radical and palliative treatment of thyroid cancer.
22. Malignant soft tissues tumors. Signs, diagnosis and treatment.
23. Malignant bones tumors. Signs, diagnosis and treatment.
24. Mediastinal tumors. Their basic diagnosis, clinical signs and treatment.
25. Epidemiology of lung cancer in Russia, ex USSR countries and western industrialized country, USA and Canada. Morbidity and mortality in lung cancer.
26. Lung cancer. Etiopathogenetic factors. Morphogenesis and its influence on tactics and results of treatment.
27. The general principle of lung cancer diagnosis. The possibility of early detection and prevention.
28. Lung cancer. Clinical variants (central, peripheral, atypical forms).
29. The principles of radical and palliative lung cancer treatment.
30. Esophageal cancer. Epidemiology. Etiological factors. Anatomical growth forms and metastasis.
31. Esophageal cancer signs, diagnosis and treatment.
32. Stomach cancer. Epidemiology. Etiology and pathogenesis.
33. Stomach cancer. Morphological classification. Forms of growth. Metastasis.
34. Diagnosis of stomach cancer. Savitskoy syndrome.
35. Stomach cancer signs according to the tumor location and growth form.
36. The main types of stomach cancer radical operation.
37. Palliative treatment of stomach cancer.
38. Colon cancer. Etiological factors. Premalignant diseases. Pathologic anatomical characteristic.
39. Colon cancer signs and symptoms. Right and left colon cancer.
40. Diagnosis of colon cancer.
41. The principles of radical treatment of colon cancer.
42. Palliative treatment of colon cancer. The concept of cytoreductive surgery.
43. Rectal cancer. Etiological factors. Premalignant diseases.
44. Pathological anatomy of colorectal cancer, growth forms and metastasis.
45. Colorectal cancer signs and diagnosis.
46. The principles of radical and palliative treatment of colorectal cancer.
47. Liver cancer. Etiological factors. Signs, diagnosis, treatment.
48. Pancreas cancer. Signs, diagnosis, treatment.
49. Breast cancer. Epidemiology. Morbidity and mortality. Early diagnostics.
50. Premalignant breast disease.
51. Etiology and pathogenesis of breast cancer.
52. The nodular form of breast cancer, the main symptoms and the mechanism of their formation.
53. Diffuse variants of breast cancer.
54. Special variants of breast cancer: cancer with a pagetoid reaction, occult cancer.
55. Diagnosis of breast cancer. Screening programs.
56. Breast cancer. Loco-regional methods of treatment.
57. Breast cancer. Systemic methods of treatment.
58. Palliative breast cancer treatment.
59. Cervical cancer, epidemiology, morbidity and mortality.
60. Etiology of cervical cancer. Premalignant and background diseases.
61. Pathological anatomy of cervical cancer. Cervical cancer variant locations. Ways of metastasis.
62. Diagnosis of cervical cancer. The possibilities of early diagnosis.
63. Cervical cancer signs.
64. The principles of radical and palliative treatment of cervical cancer.
65. Etiology of endometrial cancer. Pathogenetic variants.
66. Endometrial Cancer signs.
67. Diagnosis of endometrial cancer. The possibilities of early diagnosis.
68. The principles of radical and palliative treatment of endometrial cancer.
69. Ovaries benign tumors.
70. Etiology of ovarian cancer. Premalignant diseases.
71. Pathological anatomy of ovarian cancer.
72. Ovarian Cancer signs
73. Diagnosis of ovarian cancer
74. The principles of radical treatment of ovarian cancer.
75. Metastatic ovarian cancer. Are radical approaches possible in the treatment of not healed in time forms of ovarian cancer?
76. Etiopathogenesis of Hodkin’s Disease.
77. Hodkin’s Disease clinical-morphology classification.
78. Hodkin’s Disease signs.
79. Diagnosis of Hodgkin’s Disease
80. Hodkin’s Disease principles of treatment.
81. Morphological characteristics of lymphosarcoma.
82. Differential Diagnoses of Lymphoproliferative Disorders.
83. The principles of lymphosarcoma treatment
84. Kidney cancer. Etiology. Signs and diagnostics.
85. The principles of radical and palliative treatment for kidney cancer.
86. Bladder cancer. Predisposing factors.
87. Bladder cancer signs and symptoms
88. The principles of radical and palliative treatment of bladder cancer.
89. Prostate cancer. Predisposing factors.
90. Prostate cancer signs, diagnosis and treatment.
91. Understanding the concept of Radiation Therapy, the main stages of development.
92. Place of radiation therapy in the treatment of cancer patients.
93. Understanding the concept of Ionizing radiation, types of Ionizing radiation and their used in radiotherapy.
94. Understanding the concept of dosimetry, the main dosimetric units.
95. Sources of ionizing radiation.
96. The physical effects of ionizing radiation.
97. Biological effect of ionizing radiation.
98. Understanding the concept of radio-sensitivity. Factors that effect systems of radio-sensitivity: 4 “P” Clinical radiobiology.
99. Factors that effect radio-sensitivity system: Bergonie and Tribondeau postulate, oxygen effect, effect of cell cycle phase.
100. Understanding the concept of radio modification. Physical methods of radio modification and their characteristics.
101. Understanding the concept of radio modification. Chemical methods of radio modification and their characteristics.
102. Classification of radiation therapy methods.
103. External beam radiotherapy. Essence, classification methods, the basic equipment.
104. Brachytherapy. Essence, classification methods, scope of application.
105. System of radiotherapy: concept, essence, basic indications.
106. Structure of radiotherapy treatment. The main stages.
107. Pre-radiation period: clinical Topometry, essence, necessary equipment.
108. Pre-radiation period: planning radiotherapy.
109. Radial period, its features. Post-radiation period: radiation complications and their classification.
110. Post-radiation period: radiation complications and their classification.
111. Early radiation complications: general characteristics of radiation reactions, how to deal them.
112. Early radiation complications: local radiation reactions from the skin, classification, methods on how to deal with them.
113. Early radiation complications: local radiation reactions from mucous membranes: classification, methods of control.
114. Late radiation complications: classification.
115. Modes dose fractionation radiotherapy.
116. Intracavitary radiotherapy: the essence of the method, indications.
117. Interstitial radiation therapy: the essence of the method, indications.
118. MRI diagnosis of the spine and spinal cord diseases: degenerative changes spine, trauma.
119. Applicative method of radiation therapy: essence, indications.
120. Radiation therapy of non-tumor diseases.