**Ministry of healthcare of the Republic of Kazakhstan**

**The Kazakh Scientific Research Institute of Oncology and Radiology**

**SILLABUS**

**for students of the residency on the specialty 6R112000 "Radiation therapy"**

**Discipline**

**«Intensive therapy in radiation therapy and oncology»**

The amount of teaching hours-90 hours/2 credits

including:

Practical training-30 hours

Independent work -60 hours

Form of control: examination

**Almaty, 2017**

The syllabus is compiled according to the Model curriculum, the Residency Educational Program for the specialty "Radiation Therapy", the Instruction Letter No. 8 for the development of educational and methodological documentation in the organizations of the Republic of Kazakhstan, which are preparing for the residency approved by the Republican Center for Innovative Technologies of Medical Education and Science of the Ministry of Health of the Republic of Kazakhstan on April 27 2010 (Protocol No. 4).

Approved at the meetingRadiological Board

(Protocol 7 from "August" 25, 2017)

**Responsible for discipline: DMSTelguziyevaZh.A.**

 **PhD Savkhatova A.D.**

 **Ishkinin E.I.**

**1.** **General information**

1.1 The Kazakh Scientific Research Institute of Oncology and Radiology (address: Almaty, Abai Ave., 91)

1.2 Clinical base (clinical and diagnostic subdivisions of KazNIIOiR): department Day hospital for radiotherapy, Department of Clinical dosimetry and physical and technical support of radiotherapy, Center for Head and Neck Tumors, Neurooncology Center, Mammology Center, Thoracic Oncology Center, Abdominal Oncology Center, Oncogynecology Center , Oncourology Center, Children's Oncology Center, Department of Hemoblastoses, Center for Tumors of Bones and Soft Tissues, Department of Anaesthesiology and Reanimation.

1.3 Specialty: 6R112000 "Radiation therapy"

1.4 Discipline: «Intensive therapy in radiation therapy and oncology»

1.5 The amount of teaching hours: 90 hours/2 credit

1.6 Information about the teachers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **№** | **First and last name** | **Post** | **Academic degree** | **Priority** **interests** |
| 1 | TelguziyevaZhannatAhmetbekovna | Chairman of the Radiological Board | prof. | radiation therapy |
| 2 | SavkhatovaAkmaralDosbolovna | Head of the department Day hospital of radiotherapy | PhD | radiation therapy |
| 3 | IshkininYevgeny Ivanovich | Radiation TherapistOncourology Center | Assistant | radiation therapy |
| 4 | MukhamadievBaurzhanTursynovich | Doctorintensive care unit | PhD | Anaesthesiology and Reanimation |

1.7 Contact information:

TelguziyevaZh.A.: 8 777 590 22 33 (mob), e-mail: john @27live.ru

Savkhatova A.D.: 8 707 985 74 39 (mob), e-mail: akma\_s10@mail.ru

Ishkinin E.I.: 8 777 233 29 63 (mob), e-mail: ishkininy@gmail.com

Mukhamadiev B.T.: 8 701 933 94 90 (mob)

1.8 Policies and Procedures. The policy of discipline consists in the consistent and purposeful implementation of the educational process. Teachers' requirements for residents are based on general principles of education in higher educational institutions of the Republic of Kazakhstan:

* compulsory clothing: standard medical gown or surgical form; indoor shoes; medical mask (carry)
* strict observance of labor discipline in basic institutions
* active participation in the educational process (preparation of theoretical material, solving situational problems and tests, mastering practical skills); attending classes
* mandatory night duty in accordance with the approved plan
* compulsory maintenance of general and specialized medical documentation
* regular self-improvement (working in the library and with the Internet)
* adherence to the principles of medical ethics and deontology in relation to patients and colleagues
* timely informing mentors and the head of the department about temporary incapacity for work or other reasons for absence from the workplace
* penalties: if you miss 3 lessons for disrespectful reasons, work off in the form of night duty and prepare presentations on the topics of missed classes with subsequent protection. Passes of classes for valid reasons are worked out by self-preparation with protection of presentation on missed topics.

**2 Program**

**2.1 Introduction**

The training of highly qualified medical personnel with modern knowledge, skills and practical skills sufficient to provide qualified medical and diagnostic care is an important state task, the solution of which is possible only in the conditions of continuous postgraduate education. The training of qualified physicians - ray therapists is a complex and urgent problem. This program includes the amount of modern knowledge, skills and habits of the resident in the main specialty (radiation therapy) on the basis of the principles of evidence-based medicine with the training of qualified radiological medical personnel. In this discipline, questions of urgent conditions that arise in cancer patients are presented. Sanctified questions of the clinic, diagnostics, prevention and the basic principles of urgent therapy in the emergence of emergency conditions in patients with malignant neoplasms. Of no less importance is the study of the problem of pain syndrome, often occurring in cancer patients, which causes the undoubted relevance of the studied discipline.

**2.2 The purpose of the discipline** is the acquisition and improvement of theoretical and practical knowledge in the emergence of emergency conditions in patients with cancer.

**2.3** **Objectives of discipline:**

                   Generate general knowledge in emergency conditions occur in cancer patients.

                   Generate knowledge on prevention, timely diagnosis and basic principles of urgent therapy in cancer patients.

**2.4** **Independent work**

|  |  |  |
| --- | --- | --- |
| **№** | **Table of contents** | **Number** **of hours** |
| 1 | Participation in clinical analysis of cancer patients with acute cardiac and pulmonary disorders. | 5 |
| 2 | Participation in clinical analysis of cancer patients with acute hemorrhagic syndrome. | 5 |
| 3 | Participation in the provision of urgent therapy for the correction of emergency conditions of cancer patients. | 5 |
| 4 | Participation in the management of medical records of patients in the department of anesthesiology and resuscitation. | 5 |
| 5 | Studying of separate themes with the help of slides and other teaching aids. | 5 |
| 6 | Writing abstracts ("Urgent conditions in oncology and basic correction methods", "Acute respiratory and cardiovascular failure - the concept, the mechanism of occurrence, the clinic, diagnosis, the basic principles of intensive care", "Pain syndrome of cancer patients, the basic principles of therapy and rehabilitation activities "," Basic principles of symptomatic therapy in oncology "). | 5 |
| 7 | Reports of residents on the training troupe with the subsequent discussion of individual topics on urgent conditions | 5 |
| 8 | Preparation of reports, presentations at clinical, pathological and anatomical conferences | 5 |
| 9 | Participation in consiliums, consultations in other clinical divisions of the Institute | 5 |
| 10 | Night duty in the clinical units of the Institute | 5 |
| 11 | Work in the library, with the Internet | 5 |
| 12 | Forming the resident listener's portfolio | 5 |
| **Total** | **60** |

**2.5** **Recommended literature**

1. Zaluckij I. Oncology: a tutorial-Minsk: Lebedevka. NIS, 2007.-703 p.

2. Belogurova M. Pediatric Oncology (for doctors), 2002. – 351 p.

3. DavydovM., Ghanaians Sh. Oncology.-m.: Medicine, 2010 -920 p.

4. Katjerino J., Kahan S. Urgent status.-m.: Medpress-inform, 2008.- 336 p.

5. Cherepanova V. Urgent states in oncology. - 2009.-160 p.

6. Sumin S. Urgent status. - 2006. - 130 p.

7. Kondratenko P. Urgent condition (tutorial) – 2001. -115p.

8. Peterson S. Oncology (tutorial)-2014-288 p.

Additional literature:

9. TelguziyevaZh., ZholdybayZh.,Shibanova A. etc. Cervical cancer: epidemiology, pathogenesis, diagnosis, treatment (review of literature)// «Hygiene,

epidemiology and Immunology» -Almaty 2011,№2 (48)-P.12-15.

10. TelguziyevaZh., Goncharova T. Study of pharmacokinetics of methotrexate in tumors and in plasma of experimental animals // «Hygiene, epidemiology and immunobiology».-Almaty, 2011. -№4 (50)-Р.161-163.

11. TelguziyevaZh. Philippenko V., ZholdybayZh., Kim S. Application of techniques of complex medical visualization in an estimation chemoradiation therapy of the cancer are //ESTRO Anniversary.-London (UK), 8-12 May 2011-p. 309.

12. TelguziyevaZh. Metronomic chemotherapy with gemcitabine at radical irradiation of the cancer are//The 17th int. Meeting of the ESGO-Milan (Italy), September 11-14, 2011-p. 58.

13. TelguziyevaZh., Kim S., Bainazarova A. The survival rate of patients with cancer are at use of a combination of chemical radiomodificators and radical irradiation//The 18th International meeting of the ESGO-October 19-22, 2013. -Liverpool, UK. -P. 269.

14. TelguziyevaZh., Kim S., Bainazarova A. Perspectives of metronomic chemotherapy in the treatment of cancer are radiological//The 18th International meeting of the ESGO-October 19-22, 2013.-Liverpool, UK-P.794.

15. Ishkinin E., Ongarbaev B., TelguziyevaZh., Kim S. Availability of high-tech methods for the treatment of prostate cancer population in Kazakhstan//Oncology and radiology of Kazakhstan-Almaty, 2016.-№1 (39)-Р.50-54.

16. IshkininE., Ongarbaev B., Kim S., TelguziyevaZh.etc. Experience brachytherapy for prostate cancer //Oncology and Radiology Journal (special issue).-Almaty, 2017.-Р.108

17. IshkininE., Ongarbaev B., Kim S., TelguziyevaZh. etc. Experience brachytherapy for prostate cancer //Oncology and Radiology Journal (special issue).-Almaty, 2017.- P.161

18. Telguziyeva Zh., TrushchenkoO., Kaibarov M. Application of intensevly-modulated radiation therapy in the treatment of locally-common forms of malignant head and neck tumors.// Oncology and Radiology Journal (special issue). -Almaty, 2017. -P. 164

19. TelguziyevaZh.,Filippenko V. Patent №22356 invention «Method of treatment for cervical cancer» (15.03.2010)

20. Telguziyeva Zh.,Filippenko V. Patent №22490 invention «Method of treatment for cervical cancer» (17.05.2010)

21. Telguziyeva Zh.,Filippenko V. Patent №23075 invention «Method of integrated Ultrasound techniques to evaluate the efficiency of combined radiation therapy for cervical cancer» (15.11.2010)

22. TelguziyevaZh., BaimahashevaA., Filippenko V. etc Patent №23100 on invention «Method of treating patients with cervical cancer» (15.11.2010)

23. TelguziyevaZh.,Filippenko V., ZholdybayZh. etc. Patent №23404 from 15.12.2010 on the invention of «The way to improve the effectiveness of radiation therapy for cervical cancer»

24. Periodic protocols for diagnosis and treatment of malignant neoplasms (2012, 2015).

25. «The clinical guide to oncology» //Almaty. 2016.

26. Act implementing the master-class «High-tech radiotherapy-radiosurgery» in KazNIIOiR (31.03-04.04.2016)

27. Act implementing the master-class «High-tech radiation therapy radiation oncology (joint master class for radiologists and medical physicists)»in KazNIIOiR (28.06-02.07.2016)

28. Act implementing the master-class «High-tech radiation therapy radiation oncology» in KazNIIOiR (18.10-22.10.2016)

29. IshkininE., Kim V., Ibraimova M. etc. Radiation treatment of patients with kidney cancer with metastatic bone lesion // V Congress of oncologists and radiologists Kazakhstan-Almaty 2014.-№180-Р.106-107

30. IshkininE., Kim V., Antropova T. etc. Evolutionary development of radiotherapy for prostate cancer in the Republic of Kazakhstan // V Congress of oncologists and radiologists Kazakhstan-Almaty 2014.-No. 181-c. 107

31. Kim V., IshkininE., Almabek A. etc. Pre-radialtopometry training in 3d conformal and intensely-modulated radiation therapy, experiences in Kazakhstan // V Congress of oncologists and radiologists in Kazakhstan. -Almaty, 2014-No. 185-P. 109-110

32. Malignant tumors of testicular, prostate cancer, renal cell carcinoma, bladder cancer// Periodic protocols of diagnostics and treatment of malignancies.-Almaty, 2012.-325-377

33. Guide for the target groups of the male population screening for early detection of prostate cancer and ensure its quality// NurgaliyevN., Zhylkajdarova A., Ishkinin E., edited by m.d. Kyrgyz Republic Shmone, m.d., Prof. M.K. Alchinbaev-revision and additions. -Almaty, 2014. - 71 p. ISBN 978-601-80100-8-8

34. Early diagnosis of prostate cancer at the level of primary health care. Guidelines//ZhylkajdarovaA.,NurgaliyevN., Ishkinin E., edited by m.d. Kyrgyz Republic Author, revision and additions. -Almaty, 2014. -26 p. ISBN 978-601-80100-7-1

35. Ishkinin Y., Kim V., KossymbayevaY. Fractionation modes of radiation therapy for kidney cancer patients with bone metastasis//Irradiation and Oncology Journal of the ESTRO # 33, volIII supplement 1 april 2014, ISSN: 0167-8140 p 533 # EP-1372

The syllabus was developed in accordance with the working curriculum, discussed at the meeting of the Scientific Council of KazNIIOiR (Protocol № from «\_\_\_\_\_» \_\_\_\_\_\_\_\_\_\_\_\_ 2017).

**Responsible for the discipline: Prof. TelguziyevaZh.A.**

**PhD Savkhatova A.D.**

 **Ishkinin E.I.**