

into the blood, causing sepsis. Infection of people occurs with the use of infected meat that has not undergone veterinary and sanitary expertise. In this case, infectious diseases, carriers of which are hunting waterfowl birds, can manifest themselves as severe intoxication.

The threat of bacterial infections will exist as long as there is a carrier in nature. Since pathogens of infectious diseases are biological objects, for them, as for all living things, to keep themselves as a species is the most important thing. And this means that bacterio- and virus-carrier will always accompany life of macroorganisms.

It is necessary to implement a large-scale implementation of veterinary-sanitary and economic measures for the prevention of bacterial transport in nature.

A wide range of pathogens of bacterial diseases, carriers of which are waterfowl, allows us to talk about the need for further and more in-depth study of this process.

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DEVELOPMENT OF GUIDELINES FOR ROUTINE QUALITY CONTROL ACTIVITIES FOR A NEW GENERATION OF MEDICAL LINEAR ACCELERATORS

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The purpose of developing these new guidelines is the increased demand for automation and acceleration of quality control procedures.

Keywords: automation of measurement, medical linear accelerators.

For quality assurance of the high-tech radiotherapy techniques using modern medical linear accelerators the main goal to achieve is to maximize precision of the high radiation doses delivery to the volume of the tumor. To achieve this goal, it is necessary to guarantee high accuracy of each stage of radiation treatment.

Due to the introduction to the clinical practice of the radiotherapy department's modern and more complex medical equipment, it is necessary to develop the new comprehensive guidelines for routine quality control activities for a new generation of medical linear accelerators.

A detailed description of the methods for quality control of medical linear accelerators is contained in the regulatory document "Methods for assessing the characteristics of radiation treatment of cancer patients in high-tech irradiation on medical accelerators of electrons." This protocol contains a list of the characteristics and parameters to be monitored as well as the procedures for providing the tests.

To improve the abovementioned protocol for a new generation of medical linear accelerator quality control it is necessary to introduce the availability of applications and tools for automatic quality control of linear accelerator characteristics. Automation of the process significantly reduces the time spent on performing standard quality control procedures.

A new method for routine quality control of the medical linear accelerator will greatly accelerate the process of assessing the quality of radiation treatment, but at the same time, the highest accuracy had to be met. Measurements and evaluation of parameters, when performing automatic quality control procedures for the characteristics of the radiotherapy equipment should be carried out with the highest possible attention paid.

The purpose of developing these new guidelines is the increased demand for automation and acceleration of quality control procedures. Conducting an assessment of the characteristics of radiation treatment should not depend on the subjective opinion of one particular specialist. Automation of measurement and subsequent results evaluation gives a possibility to eliminate random errors and decreases the human factor influence.