

Krol C. I.

VIRUSES THAT CAUSE CANCER IN HUMANS AND ANIMALS

Scientific supervisor senior teacher Prostotina O. V.

Department of Foreign Languages

Belarusian State Medical University, Minsk

Cancer is a problem that has been studied all over the world for a long time, but no serious results have been obtained. Another thing is cancer caused by viruses. This option arises the cancer concept to the new level, requiring in-depth study of the action mechanism in order to choose a possible cure correctly. Based on this, the topic can be actual nowadays, and research in this direction is significant for the world community.

Consequently, we have decided to get acquainted with viruses causing cancerous tumors, according to their types (carcinomas, lymphomas, sarcomas, mesotheliomas) and occurrence (genitals, nasopharynx, liver, skin), firstly, and, secondly, to figure out how the virus causes cancer and what measures for cancerous tumors prevention exist.

During the research descriptive and logical methods of studying were used. Foreign books and foreign articles on Kaposi's sarcoma, Epstein-Barr virus, polyomavirus and papillomavirus as material sources were under the study.

The results of our work are the following : 1) The presence of the entire viral genome or part of it has been noticed in some cells of various tumors. The presence of closed covalent circular DNA molecules confirms the tumor viral origin. 2) The human papillomavirus causes not only well-known cervical cancer, but also various kinds of warts, verruciformis epidermodysplasia. Kaposi's sarcoma, T-cell leukemia, hepatocellular carcinoma caused by herpes viruses B and C are caused by viruses as well. 3) Viruses are also capable of causing cancerous tumors in animals: chickens, rabbits, cattle. 4) The virus itself is non-pathogenic. The proteins that the virus produces are pathogenic. These proteins are largely determined by the virus strain. 5) The virus can be transmitted in various ways: through the placenta from mother to child or through saliva, through the blood or through the genital tract. In most cases, it affects women (22% all cancers, 100% the viral form). It is important to take precautions and preventive measures.

So, we want to conclude that the problem of cancer has been known for a very long time. The study of possible solutions to this problem is the entire laboratory work. Viral cancer is a new section, requiring a special attention to the study from all scientists around the world. Many described cancer types, although endemic, can still go beyond these limits. Scientists should study this issue from all scientific spheres, including molecular biology. People must take precautions in sexual intercourse, because most pathogenic viruses are transmitted sexually. So, they can cause irreversible consequences because of problems in determination and treatment of these diseases types.