

Significant spatial spread of fungal infections can also explain the intense migration and changes in lifestyle. Among pharmacological factors leading role antibiotics wide Spector action using immunosuppressive drugs in organ transplantation and so on. Among pharmacological factors leading role antibiotics wide Spector action using immunosuppressive drugs. To medical factors include: general deterioration of immunity in the population, the use of invasive diagnostic methods, growing a large number of cases of diseases which are often accompanied by fungal infections (diabetes, cancer, HIV, etc.).

Conclusions. Important role in the spread of dermatophytes Ukriyini play in socio-economic, medical and pharmacological factors. There are two main ways of spreading fungal diseases: direct and indirect. Direct infection occurs through direct contact with healthy people sick. Indirect infection occurs more frequently it through various objects contaminated with infectious material (flakes of skin, nails, hair and so on. P.), containing pathogenic fungi.

THE ROLE OF VIRUSES IN CARCINOGENESIS

Lebedenko N.R, Petrova M.O

Scientific supervisor: prof. Filimonova N. I.

National University of Pharmacy, Kharkiv, Ukraine

megiddo@ukr.net

Introduction. Oncopathology problem today is very important. According to WHO statistics, 8.2 million people die each year from cancer, including Ukraine (more then 90 thousand people die each year). The World Health Organization, more than 15% of all cancers are directly or indirectly related to infectious pathogens.

Objective: find out the relationship between the onset of the tumor process and the entry of the virus into the macroorganism.

Materials and Methods: Analytical data statistics of the World Health Organization, the analysis of printed sources and electronic resources.

The results. Modern pathogenetic bases oncology as a science based on the ability of cancer cells rapidly divide abnormally - even when they do not have enough space or nutrients. Modified cells ignore signals that the body sends to them, and continue to continue to grow and multiply. A body, in turn, can not control the proliferation of such tissue.

Among the factors tumor special place oncogenic viruses, a feature of which is the potential ability to trozvytku tumors. Among these distinguished members of the DNA-containing (hepatitis B virus, Epshteyna- Barr virus, human papillomavirus, human type 8 herpevirus et al.) and RNA-containing viruses (hepatitis C, lymphoid leukemia virus, virus miyelotsytomatozu etc.).

The basis of the impact of oncoviruses on the macroorganism is a violation of antiviral immunity, which may be related to the pattern of changes in the genome, which were due to defective mechanisms of repair of DNA damage in a human cell. According to modern concepts of viral origin possible implementation by 2 mechanisms. The first mehanizm -direct - is that after infection the virus is stored and maintained in the cell as an independent genetic element. This is confirmed by direct detection of viral genetic material (the method of molecular hybridization or PCR), the formation of infectious virions offspring virusospetsyfychnyh formation of mRNA and synthesis of viral proteins. The second – indirect – involves the formation of chronic inflammation and oxidative stress in the microenvironment of normal cells due to the production of proinflammatory chemokines infected cells (hepatitis C virus), which leads to constant antigenic stimulation.

According to the L.O.Zilbera's theory of gene oncogenic virus integrates into the genome of normal cells transforming it into a tumor, that oncogenic viruses in their action fundamentally different from infectious. Today assume two fundamentally different mechanisms of oncogenic virus on cell:

1) carries the viral genome launch the transformation process, but is not involved in maintaining it (the hypothesis start);

2) to maintain the appearance and condition of the transformed cells requires the constant presence of the viral genome (hypothesis presence).

The second mechanism which can be caused by several factors. First onkovirus effect leads to the inclusion of the viral genome into the cell, and thus the virus genome occupies a position in which control cell division is disrupted. Features of this process is not necessarily functioning of the viral genome while. Secondly - not viral genome and its expression products are directly responsible for the emergence and maintenance of the transformed state of the cell.

Given the foregoing it should be noted that the essence of carcinogenesis virusindukovanoho oncogenic viruses have the ability to bring in infected cells a gene comprising transforming gene - viral oncogene. It is the product of this oncogene (onkobilok) and starts the transformation of cells and maintains it in a transformed state.

Conclusions. Thus, despite the various organizations oncogenic viruses they have some common biological properties, namely:

-virus only initiate the disease process, enhancing the processes of cell division and genetic instability they infected cells;

-from the moment of infection to the appearance of tumors is a long latency period, which lasts for years, sometimes decades;

-In most infected people of tumors is not mandatory, but they can make a risk, with a higher probability of its occurrence;

-for malignant transformation of infected cells requires additional factors and conditions that lead to the progression of the most aggressive tumor clone.

FOOD SAFETY

Lyashenko V.V.

Scientific supervisor: sen. res. Glibova K.V.

National University of Pharmacy, Kharkiv, Ukraine

microbiology@nuph.edu.ua

Introduction. Food safety is key to sustaining life and promoting good health. The presence of pathogenic bacteria, viruses, parasites or harmful chemicals in food leads to more than 200 diseases, from diarrhoea to cancers. Every year, 600 million people fall ill after eating contaminated food, 420,000 of them die.

Aim. Investigate the factors causing the development of foodborne diseases, ways of food contamination, and propose methods to improve their safety.

Materials and methods. Analysis of the scientific literature and the results of the advanced research in the field of medicine and pharmacology.

Results and discussion. Foodborne diseases are diseases of an infectious nature or intoxications, the cause of which can be bacteria, viruses or chemicals that enter the body through contaminated water or food. The causative agents of these diseases can cause acute diarrhoea or debilitating infections. Chemicals cause acute poisoning or long-term diseases, such as cancer. Foodborne illness (hereinafter – FI) may lead to loss of efficiency, disability and even death. Unsafe food are raw food of animal origin, vegetables and fruits contaminated with feces, and also any food contaminated by harmful bacteria or with wrong cooking technology. The main causative agents of FI are bacteria, viruses, parasites, prions, and chemicals. The most common bacteria that can cause FI include *Salmonella*, *Campylobacter* and enterohemorrhagic strain of *Escherichia coli*. Millions of people suffer from their influence every year. Sometimes the diseases caused by them can have a rather severe course and even lead to death. Symptoms of FI include fever, headache, nausea, vomiting, abdominal pain and diarrhoea. These bacteria can be found in food which have not passed through the necessary heat treatment like raw meat, milk,