

**EXTERIOR COAT INFECTIONS: ANthrax, rabies****Erkinov Ilkhom**

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**Abstract**

This scientific article presents the analysis of infectious diseases and the scientific basis of their treatment, rabies and anthrax.

**Key words:** anthrax, infection, latent symptoms, fever, immunodeficiency, external environment

**INTRODUCTION**

Infectious disease is actually derived from the Latin word "infecio" which means "contamination". Changes caused by the interaction between a human organism (a macroorganism) and a disease-causing microbe (a microorganism) under certain conditions are called an infectious process. If this process manifests itself in the form of symptoms of the disease, it is called an infectious disease. The symptoms of the disease may be obvious or slightly expressed. Regardless of how it is expressed, an infectious disease causes deep pathophysiological, immunological and functional changes in the patient's body. In some cases, the human body is indifferent to disease microbes. An immunoallergic reaction to the microbe does not develop. There will be no symptoms. The microbe, having settled in a known and average organ, can be detected only in laboratory tests. For example, diphtheria bacillus or meningococci can be found in a person's throat for a certain period of time, but there may be no symptoms of the disease. Such a state is called a bacterial carriage state. A disease-causing microbe is found only once in a person, and the condition in which the disease is not observed is considered to be transitory (accidentally entered the body and then left) bacterial carriage.

Infectious diseases have their own characteristics. They consist of:

1. All infectious diseases can be transmitted from patients or carriers of bacteria to healthy people around them. The possibility of spreading the disease to others depends on the duration of the disease and the duration of the disease.

2. Specificity in infectious diseases Each disease is caused by a specific type of pathogenic microbe. For example, diphtheria is caused by the diphtheria bacillus, measles is caused by the measles virus, and cholera is caused by the cholera vibrio, but the cholera vibrio never causes diphtheria, or vice versa).

. Certain periodicity is observed in the course of infectious diseases. Symptoms of the disease do not appear for a certain period of time after the pathogenic microbe enters the human body. It is called the latent (incubation) period of an infectious disease. The duration of this period varies in different diseases. For example, a few hours to 2 days for flu, 2-3 weeks for diarrhea, etc. The next period is the period when the symptoms of the disease appeared. In it, both general symptoms of the disease and clinical symptoms specific to each disease appear. These symptoms appear initially (prodromal period), develop, reach a peak,

and disappear after a certain period of time. Since the symptoms of the disease begin to decrease, the patient begins to feel better. This indicates that the period of recovery (convalescence) has begun. It often ends with a period of recovery. In some cases, the disease may worsen during this period.

In the case of infectious diseases, "complete recovery" means not only complete cessation of disease symptoms, but also bacteriological recovery. Because when the patient is completely free of diseases, the release of pathogenic microbes from his body should also stop. The fact that pathogenic microbes are not found in the analysis (smear or inoculations) after the patient is examined 2-3 times indicates bacteriological recovery. In some diseases, for example, diarrhea or paratyphoid, even after the patient recovers, pathogenic microbes are released from his body. It is called the terminal bacterial carrier state. If this condition lasts up to 3 months, it is considered to be an acute bacterial carrier, and if it lasts more than 3 months, it is considered to be a chronic carrier. 4. After infectious diseases, the patient's body develops a persistent immunity against the germs of this disease. It is an increased immunity, and the protective ability is preserved for a different period of time. For example, the last immunity from influenza lasts up to 3 years against this type of virus. Immunity that appears after measles and diarrhoea, lasts for life, and a person does not suffer from these diseases again. In recent years, as a result of scientific investigations, it has been proven that the immunity formed after infectious diseases is largely dependent on the genetic and phenotypic characteristics of the patient organism.

5. Common infectious diseases can be prevented by vaccination. The goal of vaccinating children against several infectious diseases is to prevent them. These include vaccinations against diphtheria, pertussis, measles, and poliomyelitis.

Microbes with disease-causing properties are called pathogenic microbes. When they enter the human body, they often cause disease. The severity of the disease depends largely on the virulence of the microbe. Thus, virulence is a measure of the degree of pathogenicity of a microbe. Usually, a microbe that is highly virulent causes severe disease in humans. The disease is milder when infected with a less virulent microbe. In general, depending on the degree of manifestation of the symptoms of the disease, the types of the infectious disease are distinguished as mild, medium and severe. Infectious diseases sometimes lead to death in severe cases.

Any pathogenic microbe contains a toxic substance. If the toxin is formed as a result of the microbe's life activity and spreads to the environment, it is called an exotoxin. Gram-positive microbes mainly produce exotoxins. For example, diphtheria bacillus, botulinum bacterium. According to the composition of the exotoxin, it is a protein substance and has the properties of an enzyme. Under its influence, vital systems of a person were damaged due to metabolic disorders.

Toxins released into the environment as a result of the decomposition of the microbial body are called endotoxins. It is naturally included in polysaccharide compounds and is mainly developed by gram-negative microbes. For example, the cholera vibrio, a microbe, contains a powerful endotoxin

Anthrax is an acute infectious disease in humans and animals; belongs to the group of zoonotic diseases. The disease has been known for a long time. Hippocrates also wrote about it. The causative agent of K. is *Bacillus anthracis*, a dormant bacillus that forms spores. Spores are very resistant and can survive in water for ten years (20-30 years or more) in soil.

It is transmitted to humans from sick animals - during animal slaughtering, meat processing, as well as through water, soil, livestock products. Usually, the disease is observed more in workers of this field, that is, in people who have direct contact with animals. Infection can enter the body of a healthy person through respiratory tract, skin and mouth. In humans, there are septic types of K. that damage the lungs, intestines, and skin, and the infection spreads through the blood. The symptoms of the disease also vary depending on the affected organs. In the skin form of K., the causative agent of K. enters through damaged skin. In this form, the latent (incubation) period is 2-3 days. A bump (papule) first appears on the infected area of the skin, which turns into a blister (pustule) filled with cloudy or bloody fluid. The blister will soon burst and become a black scab. New blisters form around it, the black scab grows larger, and a painless swelling is visible under it. Usually, this injury is called a "stomach abscess". It is often found on the face, wrists, neck, or legs. In this case, there is an increase in body temperature, headache, weakness, insomnia, etc. observed. After 2-3 weeks, the patient begins to recover. A patient with a pulmonary embolism suddenly develops a fever, cough, bloody sputum, chest pain, and difficulty breathing. Intestinal K. Begins like food poisoning, the patient feels nauseous, vomits, has a severe abdominal pain, and feels restless. Pulmonary and intestinal forms of K. Are very rare. Penicillin and K. Gammaglobulin are used for treatment. For the purpose of prevention, those in the profession who communicate with animals: cattle breeders, butchers, tanners are vaccinated against K.

Rabies is an acute infectious zoonotic disease caused by a neurotropic virus; It is accompanied by vasoconstriction, paralysis, spasm of the larynx and respiratory muscles. Rabies has been known since ancient times and has also been called the disease of fear of water (see Hydrophobia). The French scientist Louis Pasteur discovered a vaccine against rabies in the second half of the 19th century, so all institutions carrying out anti-rabies activities were called Pasteur stations. Thanks to their work, the lives of millions of people who were vaccinated in time after being bitten by a rabid animal were saved. The causative agent is a wild rabies virus that selectively damages nerve cells. The virus is resistant to cold, it can be stored for a long time when frozen. It quickly dies in the external environment, as well as when boiled, in 3-5% lysol, chloramine solutions. The latent period of the disease in animals is 14-16 days. This is followed by restlessness, predatory behavior, changes in behavior, and excessive salivation. The animal does not eat or drink anything. Then the blood vessel constricts, paralysis begins, and the animal dies.

Humans are infected with the rabies virus when they are bitten by an infected animal, mainly dogs, cats and other animals, or when their saliva gets on the skin. The latent period of rabies in humans lasts from 15 days to several months (20-30 days on average). This period is shorter when a rabid dog bites the neck and face, and longer when it bites the leg.

### References:

1. Erkinov Ilkhom Erkin Ogli. (2023). Life Safety and Civil Protection in Natural Emergencies. Eurasian Research Bulletin, Volume 17|February, ISSN: 2795-7365, 188-190.
2. Erkinov Ilxom Erkin o'gli: "Farmatsevtika muassasalarida sodir bo'ladigan baxtsiz xodisalar va kasb kasalliklarni o'rganish, hisobga olish tartibi"-HAVO HUYUMIDAN MUDOFAA QO'SHINLARI VA HARBIY HAVO KUHLARI XABARNOMASI ILMIIY-AXBOROT JURNALI. TAHRIRIYAT MANZILI: 180117, Qarshi shaxri, Jayxun kuchasi 54 uy O.,R OHABYu Ilmiy-uslubiy bo'limi. 1(2) 2022 y, 7-11 bet;
3. Эркинов И.Э. "Организация системы управления безопасностью деятельности в производственных учреждениях (компаниях)". HAVO HUYUMIDAN MUDOFAA QO'SHINLARI VA HARBIY HAVO KUHLARI XABARNOMASI ILMIIY-AXBOROT

JURNALI. TAHRIRIYAT MANZILI: 180117, Qarshi shaxri, Jayxun kuchasi 54 uy O.,R OHABYu Ilmiy-uslubiy bo'limi. 1(3) 2022 y. 56- bet.

4. Erkinov Ilkhom Erkin-coals, Lutfillaev Mirzohid Salokhitdinovich Samarkand State Medical Institute, Samarkand, Uzbekistan. BASIC PRINCIPLES OF THE ORGANIZATION STUDIES AT THE UNIVERSITY. World Bulletin of Management and Law (WBML) Available Online at: <https://www.scholarexpress.net> Volume-7, February-2022 ISSN: 2749-3601. 95-96 bet.
5. Эркинов Илхом Эркин ўғли, БДК 2022. ҲАЁТ ФАОЛИЯТИ ХАВФСИЗЛИГИ АСОСЛАРИ” ҚОИДАЛАРИНИ ЎҚИТИШНИНГ САМАРАДОРЛИГИ ВА АҲАМИЯТИ. JOURNAL OF EXERCISE PHYSIOLOGY.2(ISSN1097-9751),393-397. [https://scholar.google.com/citations?view\\_op=view\\_citation&hl=ru&user=JO8jN4QAAAAJ&citation\\_for\\_view=JO8jN4QAAAAJ:zYLM7Y9cAGgC](https://scholar.google.com/citations?view_op=view_citation&hl=ru&user=JO8jN4QAAAAJ&citation_for_view=JO8jN4QAAAAJ:zYLM7Y9cAGgC)
6. Erkinov Ilxom Erkin o'gli: <https://www.scholarexpress.net>
7. Erkinov Ilxom Erkin o'gli: <https://doi.org/10.5281/zenodo.7213946>
8. Makhmudov Atamurod Khoshimovich. In Technogenic and Environmental Emergencies Specific Aspects of Protecting the Population. Genius Journals Publishing Group, Brussels, Belgium Volume 17|February, 2023. ISSN: 2795-7365
9. Махмудов Отамурод Хошимович. (2023). ЖАМОАТ ХАВФСИЗЛИГИ ТУШУНЧАСИ ВА ЎЗИГА ХОС МАЗМУН МОХИЯТИ. Tadqiqotlar, 7(1), 167–174. Retrieved from <http://tadqiqotlar.uz/index.php/01/article/view/205>
10. Makhmudov Otamurod Xoshimovich. Misirova Nozigul Baxodir qizi. FAVQULODDA VAZIYATLARDA INSON HAYOTI XAVFSIZLIGINI TA'MINLASHNING AMALIY ASOS VA KO'RSATMALARI. Analytical Journal of Education and Development. Volume: 03 Issue: 05 | May-2023 ISSN: 2181-2624

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