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METHODS OF PREVENTION IN FOCUSES OF EXTREMELY DANGEROUS INFECTIONS EXTREMELY DANGEROUS INFECTIONS.

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Abstract: Cholera is an acute fecal-oral infection caused by Vibrio cholerae. It is characterized by symptoms such as watery, liquid stools, vomiting, and shock due to dehydration. The source of infection includes those who spread the cholera vibrio through feces, the patient and the vibrio carrier. Cholera develops suddenly. Liquid watery stools are passed, in which the abdomen does not hurt, but the symptoms of abdominal rumbling and excessive fullness of the intestines develop.

Keywords: Cholera, infection, cholera vibrionics, cholera pandemic, transmission mechanism, water, body temperature, severe dehydration, acute anthroponosis.

Cholera (cholera) is an acute anthroponous fecal-oral infection caused by cholera vibrio. Due to watery liquid stool discharge, vomiting, dehydration due to its severity and rapid spread, cholera is classified as an extremely dangerous infection and is included in the international medical sanitary register.

Plague pandemics have caused many deaths in ancient times. A cholera pandemic was recorded in Egypt. The last one began in 1961. Currently (1992–1994) it has been recorded in 40 countries around the world, including the southern regions of the former Soviet Union. The mechanism of transmission is through the fecal-oral route. Transmission can occur mainly through water, food, and household contacts. Waterborne transmission is of great importance in the development of pandemics and epidemics. Aquatic animals - fish, mollusks, etc. - act as temporary sources, and they have the ability to store and accumulate Vibrio cholerae in their bodies for a long time. Body temperature does not change, but in some patients it may be around 37.50C. As the disease progresses, the number of stools may increase to 20 times a day. The stools are watery, sometimes resembling "rice porridge." In many cases, "fountain" vomiting is observed.

Strong dehydration is manifested in the body - there is a change in the facial area, deepening of the eyes, the symptom of "dark glasses" and the symptom of "washing hands". One of the types of the disease is a severe form, which can cause a toxic shock due to severe dehydration in the body. In such cases, the patient dies within a few hours. Patients with suspected or confirmed cholera should be hospitalized immediately. Immediate treatment should be given, including fluid replacement and electrolyte replacement through oral rehydration.

It contains sodium nitrate (Regidron) instead of bicarbonate. If the patient has symptoms of vomiting and dehydration, he should be given 200–250 ml of this solution (1 tablespoon every 1 minute). In addition to these prepared solutions, the patient is given boiled water, tea, and soda solution. Prophylaxis: according to international regulations, people who have been in countries where cholera can spread are under control (quarantine) for 5 days. At this time, a bacteriological analysis is taken from them once. In countries where cholera is endemic, comprehensive anti-epidemic planning methods are implemented.

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In this case, patients and carriers of vibrio are hospitalized, and those in contact with them are monitored for 5 days, and bacteriological tests are taken 3 times. Plague is an acute infectious disease, characterized by severe intoxication, skin lesions, damage to the lymph nodes, lungs and other organs.

This disease is classified as a quarantine disease. Plague is one of the oldest highly contagious diseases, causing great disasters in human life. The first known pandemic went down in history in the 6th century BC under the name "Justin's Plague". This pandemic swept through Lower Egypt and the Byzantine Empire, killing 100,000,000 people over 50 years. The second pandemic, known as the "Black Death," spread to Asia in the 14th century, then to Europe through trade and to Russia via Pskov, killing about 50,000,000 people.

By this time, the quarantine method (40 days) was used for the first time in Italy. Quarantine is a limited complex method, which includes medical-sanitary and administrative methods. Quarantine method is used for all contagious highly dangerous infections. The first quarantine method was used in Venice.

Ships coming from countries with a risk of disease are not brought close to the coast for 40 days, and if there is a risk of disease, it will manifest itself during this quarantine period. Epidemiology: the source of infection includes rodents (rats, voles, mice, etc.), as well as camels and cats. The route of infection is mainly carried out by fleas, which are infected when they bite. People become infected when they come into contact with animals, their dead bodies, and their feces. Patients with the pulmonary form of the plague are considered extremely dangerous, since they can transmit the disease through the airborne route. Currently, there are known foci of plague on the globe, the spread and survival of which depend on the climatic and geographical regions of these places.

Favorable conditions for the pestilence flea are air temperature of 240C and relative humidity of 70%. Plague foci are mostly found in the Mongol-Zabaikal zone, South China, Indochina and India. In the Central Asian plain, plague centers are found in the deserts of Central Asia, in Kazakhstan, in the regions between the Urals and the Volga. In natural foci, infection mainly occurs through transmissive, contact and alimentary routes. Transmissive route of infection is through flea bites. Contact route is when the skin of killed rodents (rabbits and others) is processed. Alimentary and meat products are transmitted through insufficiently thermally treated products. Body temperature rises to 390C, body poisoning (intoxication) increases. Symptoms of severe headache, muscle pain, nausea and vomiting appear. The general condition of the patient is severe, blood pressure and pulse decrease. In the bubonic type, symptoms of lymphadenitis appear on the 1st-2nd day of the disease (bubonic plague).

The disease involves the tissues around several adjacent lymph nodes and takes the form of a bubo: tumor-like, round-shaped, painful when palpated. The skin covering on the bubo is dark red-blue in color. The pulmonary form is characterized by severe intoxication, high fever, chest pain, and coughing up blood. In the past, the pulmonary form was 100% fatal within 2–4 days. Today, thanks to the widespread use of antibiotics, this form of the disease is no longer fatal. Prevention: In case of a threat of an outbreak of an epidemic, immediate notification is given. Quarantine measures are immediately taken. Persons who have been in contact with patients are isolated. Sanitary and protective rules are observed in the territory of the Republic of Uzbekistan.

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Quarantine measures are mainly carried out at water and sea ports, highways, airports, and railways. Such measures involve the suspension of limited or semi-limited movement of people and goods. If necessary, military guard posts are established in quarantine zones. Several patients with bubonic plague are placed in one ward, and those with pulmonary plague are placed in separate boxes. Medical personnel provide care in protective clothing. Anthrax is a zoonotic infection characterized by specific erysipelas, lymph node and internal organ involvement, and sepsis.

Etiology: the causative agent is a large-sized bacillus, which can be stored for ten years. In an autoclave, the bacillus dies within 40 minutes. The source of infection is domestic animals. The route of transmission includes contact, alimentary, airborne and transmissive routes. The main factors of infection are meat, skin, wool, water, air and other components of the external environment.

The causative agent enters through the damaged skin and has the property of developing the disease. An anthrax carbuncle (inflamed focus, tissue necrosis, local swelling and redness) is formed in the area of the damaged skin where the causative agent entered. Local lymphadenitis symptoms are observed. Generalized forms mainly lead to the disease of the respiratory tract tissues (trachea, bronchi, alveoli). The disease gradually spreads through the lymphatic vessels to the lungs and coccyx, leading to tissue destruction.

Through the lymph nodes, the disease easily spreads through the bloodstream to all parts of the body, and symptoms of the disease appear. Clinical features: the incubation period lasts 2–14 days. A hard, itchy red spot forms. After a day, pain occurs at this site, a blister forms, and a black wound forms in its place.

By this time, intoxication develops in the body, patients experience fever, headache, loss of appetite, and sleep disturbances. The lesions multiply and merge, forming a scab in this area. When the fluid from the wound stops draining, a scab forms in the area of the carbuncle. Prevention: It consists of preventing the spread of disease in domestic animals and eliminating sick ones. If the disease is detected and leads to the death of these animals, they should be cremated after death and buried deep in a separate place. The causative agent of the disease was first identified in 1911 in infected deer in California. The causative agent was named Tulare (Bacterium tulareu) after the place where it was discovered. The name of this disease varies in each country: in the USA it is called "Deerfly Fever", in Japan it is called "Rabbit Disease".

The natural foci of tularemia are mainly located in the northern hemisphere. Currently, it is found in Tajikistan and Azerbaijan in our country. Epidemiology: the main source of infection is rodents and domestic animals.

The main route of transmission of the disease is through insect bites, i.e. transmissible and other routes, contact (hunting, skin contact), aspiration (breathing contaminated dust), and alimentary (contaminated food, water).

The infection can be transmitted to humans through the skin or mucous membranes of the eyes, respiratory tract, and gastrointestinal tract. The entry points determine the type of disease. The microbe enters the lymph nodes, which are bounded by the lymphatic flow, where it causes an inflammatory process, which eventually leads to the formation of granulomas and foci of necrosis (primary bubonic plague). Depending on the degree of spread of infection, secondary

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bubo is formed. Symptoms of strong intoxication and damage to internal organs are observed in the body. Clinic: latent period lasts 3-7 days. The disease begins suddenly, and the temperature rises to 38-390C.

These lymph nodes are characterized by inflammation or ulceration. In the case of the eye type of bubo, redness and swelling of the eyelids are observed. The disease can be divided into the following forms (acute, prolonged and chronic), depending on its severity and duration.

The pulmonary form of tularemia involves the bronchi and lungs. The patient is bothered by chest pain, dry cough, fever of 37.5°C, chills, and sweating. The generalized form is accompanied by fever, chills, sweating, joint pain, and skin rashes. The recovery of patients from tularemia is slow, but the mortality rate does not exceed 1%. In many cases, cholera, anthrax, dysentery, and typhus can be compared with each other. Prevention: the main measures in furnaces are the following: fight against rodents; protection from mice and other rodents entering the wells and damage to the water; organizing vaccination among the population in places where tularemia outbreaks are spread.

Smallpox is an acute viral infectious disease, characterized by severe intoxication of the body and the appearance of papulopustular rashes on the skin and mucous membranes. Considered an ancient infectious disease, smallpox has left a deep mark on the history of mankind due to its serious nature and was called the "pestilence".

Mummified human corpses of smallpox have been found in Egypt. The great scientist Abu Ali ibn Sino was the first to determine the contagiousness of smallpox. In the 4th century, smallpox spread to North Africa and the Arab countries, and in the 6th century, to European countries.

The disease was deliberately introduced to America by Spanish colonists in the early 16th century. Mexican tribes brought smallpox patients as gifts, which led to the spread of the epidemic. Epidemiology: Smallpox is one of the main quarantine diseases, and the source of infection is a sick person.

The route of transmission is air-droplet and in some cases air-dust. Currently, this disease is preserved in Africa (Kenya, Somalia, Ethiopia). Pathogenesis: the portal of infection is the mucous membranes of the respiratory tract, and sometimes the skin. Viruses that enter the body multiply.

Multiplication occurs in the lymph nodes and lung tissue, then enters the bloodstream and spreads throughout the body. Specific rashes appear on the epithelial lining of the skin. Mainly, open areas of the skin are damaged, internal organs and the adrenal glands are affected, and infectious collapse may develop.

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