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# **SEPSIS IN NEWBORN BABIES**

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*Sepsis* (Greek: sepsis - putrefaction) (infection of microbes into the blood, general purulent infection, pus in the blood) is a general infectious disease caused by the spread of purulent microbes from the local infection center to the bloodstream, lymphatic channels, and from them to all tissues and organs of the patient. Infected wounds and purulent diseases located in different areas (chicken, abscess, phlegmon, etc.) can be a source of sepsis. Umbilical cord abscess causes infant sepsis. Postpartum sepsis occurs as a result of suppuration of the uterine cavity. Usually, staphylococcus, streptococcus, pneumococcus, gonococci, Escherichia coli and other microbes cause sepsis.

The development of sepsis is caused, firstly, by the high virulence (pathogenicity) of the microbes that caused the purulent process, and secondly, by the patient's weight loss, vitamin deficiency, and a decrease in the body's defenses due to other diseases.

In the most severe form of sepsis, microbes multiply in the blood, damage it with their toxic products (toxins), and destroy red blood cells (erythrocytes). In this type of sepsis, the body temperature rises to 39-40°, the patient's flesh swells, which alternates with profuse sweating. Sometimes the skin becomes yellowish and rashes appear. In mild cases of sepsis, microbes do not multiply in the blood, but spread to various organs and tissues with the blood flow, resulting in the formation of numerous purulent foci. In such cases, sepsis lasts longer, worsens when the pus-rich area heals, and is somewhat relieved after the rupture of the substance or after surgery.

Sepsis is treated only in the hospital. Prevention of sepsis is to consult a doctor in time in case of any purulent process - when the wound is suppurating, pus, phlegmon appears. In life, it is necessary to prevent injuries, to treat small injuries, especially injuries in time. A mother caring for a baby must strictly follow the rules of asepsis [1]

The problem of sepsis in children is still relevant due to the high mortality rate (from 40% to 70%). According to the data of the SSV of the Republic of Uzbekistan, the rate of death caused by sepsis is up to 30% in recent years [2]. According to modern concepts, sepsis can be a widespread form of purulent inflammatory infection caused

by almost 40 types of pathogenic and conditionally pathogenic bacterial microflora. Gram-positive (staphylococci - up to 60%) and gram-negative bacteria (36.0%) are the most common causes in the etiological structure, and associations of microbes are considered in 4.0% of cases. In rare cases, sepsis can be caused by streptococci

*Neonatal sepsis* (sepsis of newborns) is a disease characterized by bacteremia, that is, microorganisms from the center of infection enter the bloodstream directly. Infection of a newborn baby can occur at various stages of pregnancy or after birth. Premature babies are very susceptible to this disease. Sepsis in newborns is a disease that has been registered in many cases for many years, and this pathology is characterized by a high mortality rate (from 15% to 50%). It is worth noting that the disease can be caused by pathogenic and pathogenic (staphylococci, pneumococci, streptococci, intestinal and pseudomonas aeruginosa, etc.) microorganisms on the human body.[3]

# Neonatal sepsis: etiology.

How is the baby infected? Contributing factors are a prolonged period without water, the traumatic skin of the newborn, as well as the presence of purulent and inflammatory processes in the mother's body. Bacteria and viruses enter the body very easily through breathing and mucous membranes of the gastrointestinal tract. If children develop sepsis during intrauterine development, the source of infection is in the mother's body (most often in the placenta).

# Neonatal sepsis: manifestations of the disease.

Taking into account the pathogenesis of this disease, it manifests itself in the form of early, late and nosocomial sepsis. When observed early in the first days of life, most often the infection is in utero. Pathogenic organisms enter the embryo through the placenta. Infection of the child can also occur during the passage of the child through the birth canal. Late sepsis is detected in the first 2-3 weeks of the child's post-mobile development period. In this case, the cause of the disease is the microflora of the mother's vagina. In sepsis of internal diseases of newborns, pathogenic microflora present in maternity hospitals and medical institutions are caused. It is usually caused by staphylococci, fungi and gram-negative tubes. The spread of infection can be carried out through the birth canal of the mother, through medical personnel, equipment, tools and elements of care. The immune system of newborns is very weak and cannot withstand the pathogenic effects of these microorganisms.[4]

# Symptoms of pain.

Rejection of the breast in a child, lack of appetite, frequent spitting up. Also, with sepsis, the body temperature rises (hyperthermia), cyanosis of the nasolabial triangle is observed, and the umbilical wound does not improve. During this period, it is

recommended to give the child mixtures containing lactic acid bacteria. Sepsis manifests itself in the form of septicemia or septicopyemia.

In the first case, poisoning of the organism occurs without a clear expression of infection, and in the second case, inflammation is clearly visible (for example, phlegmon, abscess, meningitis, pneumonia, osteomyelitis). Children with this pathology were immediately hospitalized and prescribed antibacterial drugs with a wide range of effects (Ampox, Ampicillin, Lincomycin, Gentamicin, Tobramycin, Ceporin). Before treatment with antibiotics, it is necessary to determine the sensitivity of microorganisms to these agents. Antibiotics can be administered intramuscularly and intravenously. Glucose-salt solutions with amino acids are introduced to restore water-electrolyte metabolism in the body, they can be administered enterally and parenterally. Immunomodulatory drugs are used to restore immunity: Thymosin, T-activin, Prodigiosan, Pentoxyl, Dibasol[5]

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