REHABILITATION AND ANASTAMOSY AFTER ILEOSTOMA IN NECROTIC ENTEROCOLITIS

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Abstract. Necrotic enterocolitis (NEK) is a serious disease with high mortality, which is often found in premature and critically ill infants. In the late stages of the disease, the need for ileostomy is often necessary. Although this procedure is an important step in saving the child's life, the subsequent rehabilitation process and restoration of the anastomosis are of great importance. After ileostomy, a child may experience fluid and electrolyte imbalance, difficulties with feeding, and a weakened immune system. Therefore, during the rehabilitation period, it is important to properly establish parenteral and enteral nutrition, prevent infections, provide special diets, and provide supportive therapy. In the next stage, intestinal continuity is restored through an anastomosis operation. For this process to be effective, the child must be brought to a complete clinical stable state. This study sheds light on the factors of complex rehabilitation and success of anastomosis after ileostomy in NEC.

Keywords: Necrotic enterocolitis, ileostomy, rehabilitation, anastomosis, infant, parenteral nutrition, infection prevention, intestinal continuity.

Necrotic enterocolitis (NEK) is a serious disease that is common in premature infants, with high mortality and complications. According to scientific literature, NEK occurs in approximately 5–10% of premature infants, and severe surgical complications are observed in about half of them. One of the most serious consequences of this disease is the need for ileostomy as a result of necrosis and perforation of the intestinal wall.[1]

Ileostomy is a surgical procedure aimed at saving the life of a child in an acute situation by bringing a certain part of the intestine to the outside. However, although the placement of an ileostomy solves the main problem, the subsequent rehabilitation process and the restoration of the anastomosis require great responsibility. Because this process can cause metabolic disorders in the child, a weakened immune system, fluid and electrolyte imbalance, feeding difficulties, and the risk of infection.

Therefore, the issues of rehabilitation after ileostomy in infants with necrotizing enterocolitis and the correct organization of anastomosis at a later stage are extremely relevant in medical practice. The article analyzes the main stages of this process, modern approaches, clinical recommendations, as well as national and international experience.

Although the exact cause of NEC has not been fully elucidated, many factors contribute to its occurrence. The main pathogenic factors are:

Premature birth: in premature infants, the morphological and functional maturation of the intestine is incomplete.

Hypoxia and ischemia: lack of oxygen in the perinatal period disrupts blood circulation in the intestinal wall.

Infection and dysbacteriosis: pathogenic microorganisms damage the intestinal mucosa.

Weak immune system: low immune defense in premature infants increases the risk of infection.

As a result of these factors, inflammation, ischemia, and necrosis of the intestinal wall occur. As a result, the intestinal wall may thin, perforation, and peritonitis may develop.

An ileostomy is performed in the following cases:

When a certain part of the intestine is removed due to necrosis or perforation.

When it is necessary to reduce the risk of infection and give the intestine a rest.

When there are serious obstacles to urination or eating.[2]

An ileostomy is the most effective measure to save the child from death. However, it is a temporary measure, and later it is necessary to restore intestinal continuity through an anastomosis.

The process of rehabilitation of a child after an ileostomy is complex and includes several directions.

The contents of the intestine that exit through the ileostomy are often liquid, not solid. This increases the risk of skin ulcers, dermatitis, and infection. Therefore:

continuous cleaning of the skin around the stoma,

use of special stoma packs and creams,

Timely treatment of skin wounds is important.

After an ileostomy, a child may experience dehydration, electrolyte imbalance, and metabolic disorders. Therefore:

parenteral and enteral nutrition are organized in a coordinated manner,

specially adapted milk is used,

electrolyte balance is monitored.[3]

Due to the weakened immune system, children after NEK are at high risk of sepsis and peritonitis. Therefore, antibiotic therapy, sterile conditions, and additional immune support are necessary.

An ileostomy causes not only medical, but also psychological and social problems. Parents experience fear and anxiety, and the child experiences pain and discomfort. Therefore, it is important for medical staff to regularly talk to parents and teach them the rules of care.

An ileostomy is a temporary measure, and when the child is stable, an anastomosis operation is performed to restore intestinal continuity.

Preparation for anastomosis

The child should have restored water-salt balance,

gained weight and stable general condition,

and no signs of infection.

Surgical methods

Ileoileal anastomosis - two parts of the intestine are restored.

Ileocolic anastomosis - the intestine is connected to the colon.

Enteral nutrition is gradually reintroduced,

infection control is strengthened,

intestinal motility is monitored.

In world medicine, there are different approaches to the treatment of NEC. For example, in the USA, children after ileostomy are cared for in special neonatal rehabilitation centers. In European countries, parenteral and enteral nutrition protocols have been developed.

Clinical protocols aimed at the comprehensive rehabilitation of children with NEC are also being gradually introduced in Uzbekistan. A number of scientific studies show that timely and without delaying anastomosis is important for the long-term development of the child.

The following complications may occur after an ileostomy:

Dehydration and electrolyte imbalance,

Skin inflammation and infection,

Ileostomy prolapse or retraction,

Recurrent stenosis or infection after anastomosis.[4]

Regular monitoring, hygiene, parenteral supportive therapy, and infection prophylaxis are important to prevent these.

In conclusion, necrotizing enterocolitis is a very serious disease in premature infants, and in its late stages, ileostomy is often the only life-saving measure. However, ileostomy is a temporary solution, and the subsequent rehabilitation process and restoration of intestinal continuity through anastomosis are crucial for the long-term health of the child.

Comprehensive rehabilitation measures include hygiene, proper nutrition, restoration of electrolyte and fluid balance, infection prevention, and psychological support for parents. If the subsequent anastomosis operation is performed in a timely and correct manner, the child's development will be stable.

Thus, the issues of rehabilitation and anastomosis after ileostomy in infants with NEC remain a relevant direction in both medical practice and scientific research.

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