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ABOUT THE SO-CALLED PROLONGED OR PERSISTENT DIARRHEA IN CHILDREN

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ABSTRACT

Assessment of the origin of prolonged diarrhea in young children presents great difficulties. There is an opinion that prolonged diarrhea in young children can be a manifestation of sepsis, which often leads to the appointment of repeated courses of antibiotics both enterally and parenterally. Due to the unresolved nature of this issue, the tactics of managing these patients, issues of hospitalization and medical examination have not yet been worked out.

KEYWORDS

Diarrhea, intestinal disorders, staphylococcus

Introduction

In this paper, an attempt is made to clarify the causes of prolonged diarrhea in children who were admitted to the Section of acute intestinal diseases (SOAID) for examination and treatment for the period from 2018 to 2022. When making the diagnosis of "prolonged" diarrhea, the WHO classification of diarrheal diseases was used, according to which, diarrhea lasting more than 3 weeks with a stool frequency of more than 4 times a day should be attributed to prolonged diarrhea, with a persistent violation of it both by nature and by its volume (polypecalia). Prolonged diarrhea should also include conditions in which intestinal disorders, "unstable stools"-appear periodically and last more than 3-4 weeks.

Material and Methods

The clinical course of persistent (prolonged) diarrhea was studied in 187 children aged 3 months to 2 years. The hospitalized children had a duration of diarrheal syndrome for 3-12 weeks. Among the hospitalized patients with prolonged diarrhea with suspected staphylococcal infection, sepsis - there were 9 children, with suspected salmonellosis - 8. The rest of the children in the emergency room were diagnosed with acute intestinal infection, gastroenterocolitic form (132) and gastroenteritic form (38). Prior to admission to the hospital, unsuccessful therapy, including antibiotic therapy (2-3 courses each), was carried out for a long time at home or in hospitals. When differentiating the causes of prolonged diarrhea, information about acute diarrhea, food intolerance by the child and parents was taken into account, excessive and insufficient feeding, somatic diseases, various types of enzymopathies were excluded. During the examination, bacteriological studies of the feces of the child,

breast milk of mothers were carried out, if necessary, a study of the patient's blood for sterility was carried out.

Results and Discussion

Among 19 children with a preliminary diagnosis of staphylococcal infection - sepsis - 12 had a history of information about previously suffered acute diarrhea with staphylococcus seeding. In this group, prolonged diarrhea was accompanied by hypotrophy (in 7), anemia (in 15). splenomegaly (in 5), prolonged subfebrility (in 12). However, in this group, the staphylococcal origin of diarrhea could be confirmed only in 9 patients. During bacteriological examination in the feces, we found Staphylococcus aureus in 7 patients and epidermal in 2.

In 1 child from this group, it was possible to assume a staphylococcal etiology of the disease based on the abundant growth of Staphylococcus aureus in the milk of a mother who had purulent mastitis, with negative results in the child. In 2 of them, growth of previously undetected flora was obtained (klebsiella- 1, proteus - 1).

In 10 out of 19 children, there was no information about previously suffered acute diarrhea of staphylococcal etiology. However, mothers indicated the presence in the anamnesis of previously purulent skin lesions (omphalitis, phlegmon pseudofurunculosis) in children (6) and mastitis in mothers (4). In this group, the staphylococcal origin of diarrhea could not be confirmed in any case. They had the growth of a different flora (enteropathogenic Escherichia coli - 4 , proteus - 6) . Prolonged stool changes in these children could not in any case be associated with previously existing purulent foci, because, despite the rapid resolution of purulent diseases and negative bacteriological examination of feces for staphylococcus, the intestinal syndrome persisted. At the same time, a thorough examination of these patients confirmed the absence of generalization of the process. Thus, out of 19 children with suspected staphylococcal intestinal lesions with prolonged diarrhea, only 9 were bacteriologically confirmed. The non-infectious nature of prolonged diarrhea was confirmed in 8 patients.

Out of 8 patients, 5 managed to achieve rapid normalization of the stool after correction of nutrition. In 2 - by excluding lactose-containing products, with the transfer to feeding with lactose-free mixture " NAN " or lactose-free mixture " Al 110". In 1 - the abolition of antibiotics (started before admission to the hospital).

Among 8 patients with prolonged diarrhea with suspected salmonellosis, 6 of them received negative results during bacteriological examination, 4 had an increase in enteropathogenic Escherichia coli and 2 had proteus. In 5 patients, it was possible to normalize the stool by excluding cow's milk from the child's diet, in the remaining patients - by correcting nutrition and applying large doses of biologics and Creon at the rate of 500-1000 units of lipase per kilogram of body weight.

In the group of patients with prolonged diarrhea, with a preliminary diagnosis of acute intestinal infection gastroenterocalitis (132), klebsiella was detected in 17 children, proteus mirabilis in 15 children.

However, the presence of these pathogens, in our opinion, was not the main cause of prolonged diarrhea, since the normalization of stool was noted after one of the stages of treatment: withdrawal of antibiotics, correction of food volume, directed diet therapy, treatment of intestinal dysbiosis. Prolonged diarrhea in children with a preliminary diagnosis of acute intestinal infection, gastroenteritis

(38) with careful and repeated examination, only in 1 case there was a positive response to staphylococcus aureus (golden 1), in the remaining patients all studies were negative.
It should be noted that treatment directed against isolated staphylococcus (antibiotic, specific phage and immunoglobulin) in these patients, the effect was not given, which cast doubt on the possibility of infection affecting the duration of diarrhea. All this made us doubt that the cause of prolonged diarrhea is an infectious agent. The proof of this was the improvement in the condition of patients after the withdrawal of antibiotics.
Thus, out of 187 children with long-term (persistent) diarrhea, 133 managed to establish the non-infectious nature of the disease, and thereby confirm that in the development of long-term diarrhea in children, the main role is assigned not to an infectious factor, but to a change in the composition of intestinal contents due to enzymopathic insufficiency (enzimopatnya), impaired absorption by the intestinal wall (malabsorption) and increase intestinal motility. As it turned out, these mechanisms are persistent, which determines the duration of the pathological process.
With persistent (chronic) diarrhea, normalization of intestinal enzymatic function, proper feeding, organization of rational nutrition, including the elimination of causally significant product (lactose, milk protein, etc.), vitamin therapy, the use of biologics, immunomodulators, phytotherapy, physiotherapy (and in no case the use of antibiotics) is of paramount importance in terms of treatment). Awareness of doctors in this matter will allow solving problems associated with irrational antibiotic therapy and polypragmasia in the treatment of prolonged diarrhea.

Conclusions

The role of the infectious factor in the development of prolonged diarrhea is very limited. Acute intestinal infection in many patients is the trigger mechanism of disorders, and does not play a significant role in the future.
The most common cause of prolonged diarrhea is secondary lactase deficiency, which develops in them as a result of acute, especially viral diarrhea, in the treatment of which it is enough to make a correction in nutrition, and not prescribe antibiotics, which, unfortunately, is often practiced.
The abuse of antibiotics and antibacterial drugs with prolonged diarrhea causes prolonged stool disorder, causing fungal intestinal lesions and "pseudomembranous " enterocolitis.Practitioners overestimate the role of dysbiosis in the development of prolonged diarrhea in children and often overlook issues of nutrition correction and directed diet therapy.

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