

Pediatrics

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FEATURES OF CLINICAL SYMPTOMS OF GASTROINTESTINAL TRACT DISORDERS IN INFANTS WITH PERINATAL PATOLOGY HISTORY

Annotation: A comprehensive clinical examinations of infants with perinatal pathology history suffering from the disorders of the functional state of gastrointestinal tract were conducted. Intestinal microbiocenosis changes were revealed; they are most likely to extend liver and bile-excreting tract dysfunction. Early diagnosis of the detected changes makes possible to improve functional state of intestine in infants and ignore dysbiosis signs.

Keywords: infants, gastrointestinal tract, clinical symptoms.

Introduction. In infants dysbiotic disorders occur more frequently than in adults; that is determined by morphological and functional immaturity of the gastrointestinal tract (GIT) in this age. There exists a point of view that severe clinically significant forms of dysbiotic disorders in the first years of life can be regarded as a prerequisite to the development of inflammatory bowel disease [1, 42-48]. The peculiar features of the GIT functional state in children of infant age are hydrochloric acid lack and proteolytic enzymes in the stomach, decreased secretion of bile by the liver, and increased oxygen concentration in the large intestine.

Normal microflora agents of GIT provide protection from exogenous infectious agents through the synthesis of different substances, inhibiting the growth and multiplication of pathogens as well as by means of successful fight between them for the places of attachment to the surface of mucous membrane of the intestine and source of nutrition. Another mechanism of ensuring colonization resistance of normal intestinal microflora agents is the one associated with their ability to cause significant non-specific stimulation of humoral and cellular immunity [2, p. 56].

Breaking up extracellular polysaccharides and glycoproteins by extracellular glycosidases of microbial origin leads to monosaccharides (glucose, galactose, etc.)

formation. Another important effect is the stimulation of local immunity, first of all – the production of secretory immunoglobulin (IgA) [3, 120].

Materials and methods of research. The main study group consisted of 25 infants with perinatal pathology history; the infants had clinical symptoms of gastrointestinal tract disorders; group of comparison numbered 25 infants without these disorders. Analysis of the obtained results was made by means of application programs package «STATGRAPHICS Plus 5.1» using conventional statistical methods of research.

Results and discussion. The retrospective study of infant development maps at birth showed that in children of the first group in 12 (48%) cases intrauterine growth retardation by hypotrophic type was diagnosed; neonatal encephalopathy was detected in 13 (52.0%) cases. Exploration of pregnancy and delivery peculiar characteristics of mothers in the main group showed that most of them had some complications. In 3 (12.0%) mothers this very pregnancy was third and fourth. 4 (16.0%) children were born by means of cesarean section.

At the time of the study regurgitation was detected in one infant that constitutes 4.0%. Frequent symptoms in the infants of this group were flatulence, constipations and abdominal pain, which constitute 7 (28.0%), 8 (32.0%) and 6 (24.0%) cases respectively. Isolated cases of regurgitation, flatulence, poor sucking and constipation were observed in children of the second group.

Developmental factors concerning disorders of the intestinal functional state in infants were severe illnesses, they had suffered from, and with which they were repeatedly admitted for treatment to the pediatric hospitals. Thus, 3 (12.0%) children recovered from acute obstructive bronchitis, 3 (12.0%) suffered from enterocolitis; in 2 (8.0%) cases tracheobronchitis was in past history; 1(4.0%) infant recovered from upper respiratory tract infections (URTI) and in 1 (4.0%) case salmonellosis was revealed in the past history. Children were treated in accordance with existing protocols and clinical guidelines, including antibiotic therapy, nonsteroidal anti-inflammatory, bronchospasmolytic and anticonvulsant medical preparations that, along with the basic pathology, contributed to an increased risk of intestinal disorders development.

Examination of all infants in the first group revealed clinical symptoms of abdominal dysfunctions, among which there are: constipation – in 8 (32.0%) infants, predisposition to the liquid stool – in 4 (16.0%) infants; signs of flatulence with abdominal distension, intestinal colic and characteristic infant pose with adduction of

the legs – in 7 (28.0%) cases. 5 (20.0%) children had appetite abnormalities (dysorexia); in 1 (4.0%) case regurgitation was observed. Clinical manifestations of jaundice were noted in 1 (4.0%) infant; enlargement of the liver was also observed in 1 (4.0%) case. 4 (16.0%) children experienced nervousness and constant crying. In addition, macroscopically the faeces of infants contained mucus and undigested food. Coprogram in most cases was characterized by a high content of neutral fat, amount of epithelium and white blood cells.

Conclusion. Dysbiosis gastrointestinal manifestations in infants are a consequence of perinatal pathology in the neonatal period that usually occur in combination with functional disorders of other organs and systems, including, hepatobiliary one. Early signs of the appearance of gastrointestinal tract dysbiosis may be detected by means of diagnostic research complex and prevented by early administration of correcting therapy (prebiotics, probiotics, functional food). Prospects for further research consist in studying pathogenic mechanisms of intestinal dysfunctions development, diagnostics and correction methods.

Literature.

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