

MORPHOLOGICAL BASIS OF BARRIER, DRAINAGE AND LYMPHOCYTOPOIETIC FUNCTIONS OF REGIONAL LYMPH NODES IN CHILDREN'S ACUTE INTESTINAL INFECTIONS

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Abstract: Acute intestinal infections (ABII) occupy a leading place in the structure of children's infectious pathologies. Various types of pathogens, including bacteria, viruses, parasites, cause infectious diarrhea, in which the rate of mixed infection is high, taking into account the bad consequences, prevention and treatment of these infections should be carried out at a scientific level. Acute intestinal infections in children are a very urgent problem in practical health because they are often acute, severe, and cause unexpected complications and consequences. In most cases, these diseases are observed in children born prematurely, with anemia, immunodeficiency, intestinal microbiocenosis, and damage to the central nervous system. Today, despite the development of prevention, laboratory diagnostics, and emergency procedures for these infections, cases of death still occur. According to the WHO, in 2010, acute diarrheal infections accounted for 11% of deaths among children under 5 years of age. 13% of acute intestinal infection in European countries, 12.8% in the USA. In the Russian Federation, child mortality from acute intestinal infections remains high (11.9%).

Key words: Europe, USA, Russia, Rotavirus, Intestines, Acute intestine, Immunity, Pneumonia, Andijan.

Introduction: According to the data of international studies, 50-80% of cases of AKI (O'II) are caused by diarrhoeic viruses, in the first place by rotavirus of group A and norovirus of genotype 2 (12-16). In Russia, the incidence of rotavirus gastroenteritis is 7-35%. A large-scale examination of the etiology of AKI showed that the incidence of group A rotavirus in the form of mono-infection was 32.1%, group C rotavirus 0.6%, norovirus 11.9%, adenovirus 4.3%, astrovirus 1.3%, sapovirus 0.2 % made sure.

It is known that important changes occur in the organs of the immune system, including the lymph nodes, when the body is infected with an infectious disease. In acute infectious diseases in children, initially metabolic changes, additional enzymatic imbalance and weakening of the antioxidant system are observed. Peroxide oxidation of lipids and dysfunction of immunocompetent cells due to hypoxia in intestinal wall and tissue of regional lymph nodes is observed, resulting in a decrease in immunity. In the literature known to us, there is no information on drainage, barrier and lymphocytopoietic functions of regional lymph nodes in children's acute infections. Therefore, in this scientific study, the main goal was to study the morphological changes that develop in the regional lymph nodes in acute infections of children, which show their draining, barring and lymphocytopoietic function.

Literature analysis and methodology: Acute intestinal infections (AI) occupy one of the leading places in childhood infectious pathology. With the exception of a slight decrease in incidence in

some years, it does not have a downward trend, and intestinal infections take one of the first places in infant mortality in Russia (Uchaykin V.F., 1999; Uchaykin V.F., Molochniy V.P., 2002). The etiological structure of OCI is characterized by clear polymorphism. For many years, dysentery and salmonellosis take the leading place among the intestinal infections in children (Cherkassky B.L., 1997; Solodovnikov Yu.G., 1999; Onishchenko G.G., 2002). Currently, due to the deterioration of the socio-economic living conditions of the population, the increase in the incidence of shigellosis and salmonellosis due to the change in the pathogenicity of microorganisms, the tendency of their clinical appearance to worsen and increase is clearly observed. with increased frequency and the appearance of chronic forms of the disease (Lytkina I.N. and others, 1999; Nisevich N.I., 2001; Vorotyntseva N.V., Mazankova L.N., 2001). There is no doubt that the nature of the infectious process is determined by the activity of non-specific and specific body defense factors. At the same time, existing traditional diagnostic methods do not allow to evaluate the body's response to the introduction of a pathogenic agent in the early stages of the disease or to determine the role of resistance mechanisms. Manifestation of the functional capabilities of immune cells (ICC) in the processes of identifying pathogens and forming an immune response is determined by their intracellular metabolism, which is provided by a certain level of enzyme activity (Bulygin G.V. et al., 1999). All modulators of the functional activity of lymphocytes, which are the main structural and functional element of the immune system, first of all, change the metabolism of the cell, transfer the substrate flow from one metabolic pathway to another, affect the energy and synthetic processes of the cell, the violation of immunoreactivity cannot have a metabolic basis (Trufakin V. A. et al., 1995; Savchenko A.A., 1996).

Viral lesions of the gastrointestinal tract (GIT), accounting for more than 60% of acute intestinal infections of established etiology, are the most common type of infectious diarrhea [2]. They remain one of the leading causes of childhood illness and death worldwide. Until the 1970s, diagnostic methods for intestinal infections were limited and only bacteria and protozoa could be detected. In this situation, the percentage of laboratory confirmation of the cause of intestinal infection was relatively small (usually in the range of 30-40). The majority C INE (unknown etiological intestine infections). is called In the 40s. 20th century One row researchers viruses many p cause of CINE in cases to be that it is possible guess they did in 1972 feces samples using electron microscopy on inspection The causative agent of Norfolk (norovirus). Found out that in adults of gastroenteritis one row to their hearths reason was [3]. In 1973 the same way in children of diarrhea today's of the day main reason has been rotaviruses to determine for used That's since then and head discover done pathogens about knowledge significant level expanded [1]. According to the World Gastroenterology Organization (WGO). According to, diarrhea up to 5 years has been in children (8%) followed by pneumonia (16%). Illness and of death second reason being remains _ in the Russian Federation last ten annually sharp intestine infections with morbidity is 100,000 530-600 per population organize did _ in Russia of illness the most high level from 1 to 2 years was (100 thousand 890.49 per population) and one children under age (593.48 per 100 thousand). In groups note done _ of the intestine organized lymphoid formations and their structural and functional characteristics.

Research material and methods used:

As the material of the research, pieces of intestinal wall and regional lymph nodes taken at the time of autopsy examination of children who died from acute intestinal infections in Andijan Regional PA Bureau and RPAM Department of Children's Pathology were considered.

No	Research groups	the
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		number
1	Children under 1 year	20
2	2-3 children	20
3	4-5 year old children	20
	Total	60

The clinical and anamnestic analysis, laboratory, virological and bacteriological examination data obtained during the examination of the corpses of children who died from acute intestinal infection of the Andijan Regional PA Bureau and RPAM Department of Children's Pathology, fragments of intestines during autopsy and lymph nodes taken from the mesentery were considered as the object of research.

The results of the analysis of the clinical-anamnestic, bacteriological and laboratory examination data of children in acute intestinal infections are used as a program for clinical doctors in the prevention and treatment of these infections.

Information about the specificity of the morphological changes characteristic of the developed barrier, drainage and lymphocytopoietic functions in the layers of the wall of the ileum and large intestine and in the lymphoid tissue associated with the wall in acute intestinal infections in children serves as a fundamental basis for clinicians.

Morphological changes specific to barrier, drainage and lymphocytopoietic functions developed in regional lymph nodes under the influence of viral or bacterial pathogens from acute intestinal infections have important practical significance as a response to viral infection.

Of the barrier, drainage and lymphocytopoietic functions of the intestinal wall and regional lymph nodes developed as a result of acute intestinal infections, the prediction and diagnosis algorithm is the main program in the prevention, prevention and treatment of these infections.

Used literature:

1. Belyakov, N.A. Enterosorption / N.A. Belyakov. - L, 1991. - 336 p.
2. Borodin, Yu.I. Problemy ecological lymphology / Yu.I. Borodin // Archive AGE. – 1989. – No. 6. – S. 5–14.
3. Golubev, A.M. Correction perforationom postishemicheskikh izmeneniy v tonkoy kishke / A.M. Golubev, D.A. Bisarab, V.P. Kojura i dr. // SPb: VMedA, 2001. – S. 15–16.
4. Huseynov, T.S. Limfaticeskoe ruslo tonkoy kiški cheloveka / T.S. Huseynov. - Makhachkala: DGMA, 1999. – 100 p.
5. Huseynov, T.S. Anatomiya limfaticeskogo rusla tonkoy kishki eksperimentalnyx jivotnyx / T.S. Huseynov, S.T. Guseynova. Makhachkala: Nauka Plus, 2008. - 138 p.
6. Ivanitsky, G.R. Perspektivnye razvitiya perfortuglerodnykh preparatov na rubeje XX veka /G.R. Ivanitsky // Mater. 1st Vseros. Nauch.
7. Conf. po perfortuglerodnym soedineniyam. -S Pb, 1999. - S. 32–33.
8. Konenkov, V.I. Complex analysis function lymphatic system / V.I. Konenkov // Journal of Lymphology. – 2008. – No. 2. – C. 27–28.
9. Maevsky, E.I. Biological activity perfortorganicheskikh soedineniy i ix emulsiy / E.I. Maevsky // Mater. 1st Vseros. Nauch.

10. Conf. po perftoruglerodnym soedineniyam. - S Pb, 1999. - S. 52–54.
11. Joldi, M. The brain and the lymphatic system / M. Joldi // Lymphology-1996. - Vol. 29. – P. 10–14.
12. Foldi, M. Lymphatic drainage of the brain / M. Foldi, B. Csillik, OB Zoltan // Experientia. - 1968. -Vol. 24. – H. 1283–1287.
13. Golubeva I.A Sibirsky konsilium [Siberian consultation]. 2004, no. 1, pp. 12–14.
14. Borodin Yu. I. Fundamental'nye problem lymphology and cellular biology: sb. Nauch. Rabot XI Mezhdunarod. Conf. [Fundamental problems of lymphology and cellular biology: collected articles of XI International conference]. Novosibirsk, 2013, pp. 5–6.
15. Karelina N.R Morphology [Morphology]. 2010, no. 4, p. 88.
16. Foldi M. Experientia. 1968, vol. 24, pp. 1283–1287.
17. Borodin Yu. I, Gorchakov VN, Gaspina TK Morphology [Morphology]. 2006, vol. 129, no. 4, p. 26.
18. Kozlov V.I, Azizov GA, Gurova OA Morphology [Morphology]. 2010, vol. 137, no. 4, p. 94.
19. Petrenko VM Fundamental'nye problem lymphology and cellular biology: sb. Nauch . rabot XI Mezhdunarod. Conf. [Fundamental problems of lymphology and cellular biology: collected articles of XI International conference]. Novosibirsk, 2013, pp. 212–213.
20. Guseynov TS, Guseynova ST Anatomy lymphatic Russia tonkoy male experimental'nykh zhivotnykh [Anatomy of the lymphatic channel of the small intestine in the experimental animals]. Makhachkala: Nauka plus, 2008, 138 p.