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ASSESSMENT OF SPECIFICITY OF FEATURES OF ACUTE APPENDICITIS IN CHILDREN UNDER 5 YEARS OF AGE

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Abstract:

This article collects data on the occurrence of acute appendicitis in children under 5 years of age, which characterize the algorithm of physician's actions for diagnosis, treatment and prevention of this disease and help him quickly to make the right clinical decisions. They are intended to introduce the most effective and safe medical technologies into daily clinical practice, to prevent decisions on unwarranted interventions and thereby to improve the quality of medical care. These clinical guidelines are not aimed at the treatment of various forms of appendicitis.

Keywords: acute appendicitis, emergency surgery, clinical recommendations, children.

RELEVANCE. Acute appendicitis is a fairly common disease in children. Its age peak is 9-12 years old. Diagnosis in children, compared with adults, is difficult, and the disease itself is more severe [3].

Mortality from acute appendicitis among children for many years has remained at the level of 0.06 to 3.5% (in different age groups) and has no tendency to decrease [5,7]. Therefore, the problem of diagnosis and treatment of acute appendicitis in children remains very urgent.

According to the literature, acute appendicitis at the age of under 1 year is extremely rare and accounts for 0.06% to 0.2% of patients with this pathology. In children under 5 years of age destructive forms of acute appendicitis with peritonitis predominate. This is caused by anatomical peculiarities of the appendix (thin wall, underdevelopment of the greater omentum, higher location of the cecum). Difficulties of contact with children of this age, make diagnosis difficult, general symptoms prevail. Diagnosis of OA in children under 5 years of age is still a difficult problem. The clinical picture in all children is dominated by general symptoms over local ones due to imperfect CNS development at this age. Therefore, in the diagnosis of OA at this age, it is very important to find one of the local symptoms of inflammatory process in the appendix: passive muscle tension of the anterior abdominal wall in the right iliac region, local tenderness, Schetkin-Blueberg symptom. [6,9,10].

Assessment of the course of acute appendicitis in children is complicated by the more rapid progression of inflammatory phenomena and less pronounced symptoms. In addition, the child does not know how to report them in time. There is a more rapid reaction of children to infection and less resistance to it [2]. The position of the appendix in the abdominal cavity and in relation to the ileocecal bowel in children is less typical than in adults. More often in children, the appendix is located in the right lumbar region and under the liver, especially in children under 3 years of age. The position of the appendix depends on the variations in the location of the cecum and the relationship with the ascending colon. The variety of position of the appendix is increased by variants of rotation of the intestine, tipping, tucking and turning along the axis of the ileocecal part of the intestine (A.R. Shurinok). In children under 5 years of age, the initial part of the appendicular appendix is located above the umbilicodorsal line in 80% of cases, while in 80% of adults the base of the appendix is below this line. Thus, Mac Burney and Lantz points are not of great diagnostic value in acute appendicitis in children (V.E. Deyneka). The greater omentum, which timely "signals" about the inflammatory process and tries to delimit it, in newborns and small children is poorly developed. By 6 months of age its lower edge is 3.5 cm above the navel, by 2 years - 2 cm above the navel, by 10 years - 1 cm below it. Rapid development of the omentum occurs during puberty[1,4,12]. By this time, the cecum descends much lower in accordance with the growth of the ascending colon. Diagnosis of acute appendicitis is particularly difficult in infants and young children. [11,13].

The disease is often recognized only after perforation [6]. It should be noted the sterility of clinical symptoms, the relative frequency of diarrhea. Severe general condition with toxemia accompanies perforation followed by disseminated peritonitis,

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especially severe in a young child. Delimitation of the inflammatory process is difficult due to underdevelopment of the omentum. In the lateral and retrocecal location of the appendix, acute appendicitis is often latent with few pronounced symptoms. Pain is localized to the back and side and is detected by palpation of the lower back. If the inflammatory process is close to the iliopsoas muscle, there is forced flexion of the lower extremity at the right hip joint. A special palpation technique makes it easier to detect an infiltrate near the iliopsoas muscle[2]. When the child is on the healthy side, the iliopsoas muscle is strained when the lower extremity is flexed.

In order to detect iliopsoas muscle tension, the Jaworski's test is used. When the inflamed appendix is located in the malomniotasis, all the usual symptoms are absent from the beginning: vomiting, muscle protective tension, soreness. If the rupture does not occur, the disease may pass under the guise of malaise, indigestion. The development of an inflammatory infiltrate or abscess around the appendix in the immediate vicinity of the rectum is manifested by painful urges to the act of defecation (tenesmus), the temperature rises, liquid mucous stools are discharged, i.e. the picture of enterocolitis is noted. If the inflammatory infiltrate is located near the bladder, pain during urination and leukocytes in the urine appear, i.e. the picture of cystitis. Typical signs of acute appendicitis with vomiting, protective muscle tension, and painfulness occur as the inflammation passes from the pelvic cavity to the abdominal cavity. Often local symptoms appear on the left side - the so-called left-sided appendicitis [4], which is explained by the anatomical features of the pelvic organs. Rectal examination in such cases is crucial. Despite the poor development of the greater omentum, cases of covered acute appendicitis are not uncommon in children after the third year of life. It can occur in two variants. In the first variant - with the appendix covered by the omentum, at first there are no symptoms indicating the presence of an inflammatory process in the abdominal cavity. They appear later, at the breakthrough into the abdominal cavity. In the second variant, there is a biphasic course: after vomiting and soreness at the beginning of the disease, these symptoms quickly subside [1,5]. However, soon, after a few days, they reappear after the inflammatory process spreads to the abdominal cavity. Acute appendicitis often occurs against the background of some childhood infectious diseases: measles, scarlet fever, as well as angina and influenza [4,6]. In these cases, vomiting and abdominal pain are initially mistaken for symptoms of the first disease. Acute appendicitis is recognized after perforation, with the development of peritonitis.

PURPOSE OF THE STUDY: To improve the efficiency of diagnosis, differential diagnosis and treatment of acute appendicitis in children under 5 years of age

MATERIALS AND METHODS OF THE STUDY. 106 children were admitted to the Department of Pediatric Surgery of the Andijan Branch of the Republican Center for Epidemiology and Surgery from 2020-2022. 106 children under 5 years old were diagnosed with acute appendicitis, which was 100%. Among them there were 3 newborns, which was 2.8%. Sixty-eight boys and 38 girls out of 106 patients were ill.

Because of the difficulty of contact with children under 3 years of age, it was advisable to examine them in the state of medicated sleep. For this purpose we used sibasone 0.2-0.4 mg\kg. Of additional methods of investigation we used ultrasound of abdominal cavity organs, and patients with destructive forms had effusion in abdominal cavity**.**

RESULTS: Acute appendicitis is an inflammation of the abdominal joint and one of the most common diseases of the abdominal cavity in children, requiring urgent surgical intervention. The course of acute appendicitis in children is somewhat different from that in adults, due to the peculiarities of age.

All child patients had an increased number of leukocytes, left shift of the formula and in 15 cases - mild anemia. Late hospital admission was noted in 63 of them, 7 patients in 5-6 days from the disease onset, as they were erroneously admitted to an infectious disease hospital.

All patients were operated after preoperative preparation. Among them, acute phlegmonic appendicitis in 23 of them, acute gangrenous appendicitis in 35, and gangrenous-perforative appendicitis in 48. Local purulent peritonitis occurred in 20 patients, and purulent peritonitis in 63 patients.

In 4 patients with total abscessed peritonitis a programmed laparostomy was performed followed by periodic abdominal sanitation. In our examined children, appendicitis developed more rapidly than in adults, especially in children of the first years of life, and often caused peritonitis (a severe complication of the disease). Acute appendicitis can occur at any age, but it was mostly observed before the age of 5 years. The incidence in girls and boys was almost the same, and they were more severe with the onset of this disease than in older children. In our examined children, acute appendicitis, especially in children over 3 years of age, usually started gradually. The main

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symptom was pain, most often near the lower back, then engulfed the entire abdomen and only a few hours later settled in the right lateral region. The pain was usually of a constant excruciating nature. Vomiting usually occurred once, with some children experiencing stool retention. In the first hours, body temperature increases slightly in normal or uncomplicated forms of acute appendicitis. As a rule, sleep is disturbed, appetite is reduced or absent at all.

Clinical manifestations of acute appendicitis in infants often developed rapidly against a background of complete health. The child became restless, depressed, refused to eat, the temperature rose to 38-39, judging by behavior, severe vomiting appeared, and liquid stools appeared more often. Blood or mucous mixtures were found in the stool. Based on this scientific work, we recommend that parents urgently consult a doctor if they notice any or all of the above symptoms in their child, to rule out the need for urgent action or surgery. Be sure to take the temperature and pay attention to how the child prefers to lie down.

Conclusion. Thus, destructive forms of appendicitis with peritonitis are common in children under 5 years of age because of the predominance of general symptoms over local symptoms. Based on the above, sick children at this age should be hospitalized immediately at the first visit, thus speeding up diagnosis and improving treatment.

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