AJPMHS GLOBAL RESEARCH NETWORK

AMERICAN Journal of Pediatric Medicine and Health Sciences
Volume 01, Issue 08, 2023 ISSN (E): 2993-2149

Features of Congenital Intestinal Obstruction in Newborns

Raupov F. S., Nuriddinov S. S.
Bukhara State Medical Institute, Bukhara. Uzbekistan

Abstract: In this article, the authors present the most common causes of congenital intestinal obstruction in newborns, features of the clinical course, difficulties in diagnosis and treatment.

Keywords: congenital intestinal obstruction, newborns.

Relevance. Despite the achievements of modern science in the field of medicine, the problem of diagnosis and treatment tactics for congenital intestinal obstruction (CIO) in newborns has been and remains a serious medical and social problem [2,8,15]. The problems of improving the quality of medical care for children in the first days and months of life with surgical pathologies in modern conditions require an effective, timely solution [1,6,9,22]. Congenital anomalies of the gastrointestinal tract in the structure of all congenital anomalies of the body account for about 30%, occupying third place [3,5,13]. Of these, about 33% are VCH, while the mortality rate from this pathology of the environment of newborns was and remains high [14,25]. According to the literature, VCH is diagnosed with a frequency of 1:1500 to 1:2000 among live births with the same frequency in boys and girls [8,9,18]. In modern medicine, the success of surgical treatment largely depends on timely diagnosis, as well as the earliest possible transfer of the newborn to a specialized hospital and timely initiation of adequate preoperative preparation [4,20,25]. Of great importance in preserving the life of a newborn are the correct intraoperative assessment of the pathophysiological state of the abdominal organs and the correct tactics of surgical treatment. Proper management of the patient in the postoperative period with adequate infusion and transfusion therapy is one of the foundations for the positive results of surgical treatment of VCI [11,19,21].

Indications for surgery, the timing of their implementation, the volume of surgical interventions, approaches and assessment of the effectiveness of repeated surgical procedures remain the subject of discussion among both domestic and foreign specialists [3,6,9,16,24]. Performing palliative operations for emergency indications also has its drawbacks: irrational removal of colostomies, long-term shutdown of various parts of the colon, lead not only to difficulties in performing reconstructive intervention, but also significantly complicate the postoperative rehabilitation of these same children. rehabilitation of these same children [2,5,10,12,17]. Postoperative complications that arise in the long-term follow-up period worsen the prognosis and results of surgical treatment and affect the quality of life of patients. A study of the literature data showed that scientific data devoted to the study of factors leading to the formation of VCI in newborns, as well as in diagnosis, treatment and management tactics, are very rare [2,8,23,25].

Purpose of the study. Study of the clinical features of congenital intestinal obstruction depending on the anatomical form of the pathology in newborns.

Material and methods. This work is based on examination and treatment data of 46 patients diagnosed with “Congenital intestinal obstruction” in newborns who received surgical treatment in the neonatal surgery department of the Bukhara Children’s Multidisciplinary Medical Center,

which is the clinical base of the Department of Pediatric Surgery of the Bukhara State Medical Institute for the period 2019 – 2020. When distributing patients by gender, 22 (55.9%) were boys, 24 (44.1%) were girls. 17 patients (37%) had a complicated obstetric history, 12 (26.1%) newborns were premature, multiple malformations were detected in 17 (36.9%) patients. They were admitted with congenital intestinal obstruction from district hospitals according to the dignity. aviation 21 (45.6%) newborns, 8 (17.4%) were from the city and suburbs of Bukhara, 17 cases (36.9%) patients were sent to the hospital from remote regions. According to the length of hospitalization, in the first 2 days of life, sick newborns from the regions were admitted in 34 (74%) cases, the remaining 12 (26%) newborns were admitted on the 3rd day or more from the moment of birth. At the same time, earlier hospitalization was revealed in the group of patients with low intestinal obstruction due to the presence of a more vivid clinical picture and rapid deterioration of the newborn's condition, while with low intestinal obstruction the patient's condition remained relatively stable for a long time. Both in the group of patients with high and low congenital intestinal obstruction, in half of the cases there was a clinical picture of partial intestinal obstruction, and the lack of severity of clinical symptoms led to a later diagnosis and hospitalization in a surgical hospital. As you know, congenital intestinal obstruction is characterized by the absence of meconium, vomiting and visible changes in the condition in the abdomen; information obtained from an x-ray examination is very valuable to clarify the diagnosis.

Based on clinical, laboratory, and X-ray studies, a high form of intestinal obstruction was established in 33 (71.8%) newborns, while a death was recorded in 4 (8.7%) cases. Low intestinal obstruction was diagnosed in 13 (28.3%) patients and mortality was noted in 3 (6.5%) cases.

Result and discussion. The variety of pathomorphological variants of intestinal tube defects makes it difficult to choose not only surgical tactics for treating a particular type of congenital pathology, but also the surgical technique itself. The surgical intervention was carried out after preoperative preparation, the duration and nature of which were determined depending on the type of defect, timing of admission, the presence of complications, the severity of the child's condition and body weight deficiency. Surgical tactics for high intestinal obstruction were determined depending on the identified pathology. In the structure of high intestinal obstruction, the acute form of congenital pyloric stenosis was more common - 19 (41.3%) newborns, who, as is customary in classical surgery, underwent supmucosal pyloromyotomy according to Fred-Ramstedd with a favorable outcome. Ladd syndrome was observed in 7 (15.2%) patients who were operated on with a successful outcome. The membranous form of duodenal atresia was found in 2 (4.3%) patients who underwent duodenotomy with circular membranotomy . An annular pancreas was detected in 3 (6.5%) cases, since the operation of choice in these cases is the imposition of a physiological duodeno-duodenoanastomosis , which was carried out in one (2.2%) case with a successful outcome, in the remaining 2 In x (4.3%) cases, the diastasis between the segments was significant and did not allow comparison of the afferent and efferent loops, and in these patients a bypass duodenojejunostomy was performed . Unfortunately, both cases were unsuccessful. An interesting fact was the establishment of a membranous form of gastric duplication (in one case), which gave a clinical picture of high intestinal obstruction, to eliminate which it was necessary to perform an operation - gastrotomy , circular membronotomy followed by gastroplasty. Hyperfixation and bending of the initial part of the jejunum in the area of the Treitz ligament was eliminated by separating congenital adhesions.

During this period, 13 (28.2%) newborns were admitted with congenital low intestinal obstruction. In most cases - in 7 (15.2%) patients, the cause of intestinal obstruction was intestinal atresia, in 1 patient (2.2%) a volvulus of the afferent loop was detected, the expansion of the scope of resection in which caused the "short bowel" syndrome and as a result, death was observed. Meconium Clinic ileus was detected in one patient; due to the presence of signs of meconium peritonitis due to perforation of the afferent loop, the patient had to undergo an ileostomy. In 2 (4.3%) patients with low obstruction, the cause of obstruction was adhesions

secondary to ulcerative necrotizing enterocolitis, and one patient was operated on with an acute form of Hirschsprung's disease, the cause of which was total aganglionosis of the colon (Sulzer - Wilson disease) , after resection of the colon, a terminal ileostomy had to be applied due to the presence of peritonitis. In the postoperative period on the 3rd day, death was observed. The absolute indications for stoma removal were cases of colonic atresia and ileal atresia associated with perforation and peritonitis [4]. The extent of resection depended on the level of atresia and the severity of secondary changes in the atretic segment.

Conclusion. Thus, the results of the study showed that VKN in 71.8% of cases manifests itself in the form of high intestinal obstruction, in 13 (28.2%) cases it manifests itself in the form of low intestinal obstruction, and in 17 (36.9%) cases there is a combination with other malformations of internal organs. With high intestinal obstruction, the acute form of congenital pyloric stenosis and Ladd syndrome predominate , while with low intestinal obstruction, various variants of small intestinal atresia predominate.

List of used literature:

1. Aliev S.A. “Features of diagnosis and surgical tactics for adhesive intestinal obstruction” // Surgery, 1994, No. 2, p. 13-17;
2. Bairov G.A., Sitkovsky I.B., Topuzov V.S. / Intestinal obstruction in children. Tutorial. 1977 -P.248.
3. Bykovskaya T.Yu., Shishov M.A. Current issues of the organization medical care for newborns with surgical diseases // Medical Bulletin of the South of Russia. 2015. - No. 1. - P.40-43.
4. Raupov, F. S. (2020). Possible dysfunction of the large intestine after resection in children. Problems of biology and medicine, 3, 78-81.
5. Raupov, F., & Akhmedov, A. (2023). Features of the structure of the sigmoid colon in the sphincter region in white laboratory rats in late postnatal ontogenesis. International Bulletin of Medical Sciences and Clinical Research , 3(6), 230–237.
6. Savvina V.A., Varfolomeev A.R., Nikolaev V.N., Okhlopkov M.E. Congenital intestinal obstruction: Choice of surgical tactics and intestinal suture technique // Far Eastern Medical Journal. 2012. No. 4. -WITH. 216-218.
7. Sayidovich, R. F. (2022). Morphological Aspects of the Human Colon and White Laboratory Rats. Central Asian Journal of Medical and Natural Science, 3(2), 243-247. https://doi.org/10.17605/OSF.IO/KCU8V.
8. Ergasheva N. N. Features of the clinical picture of congenital intestinal obstruction in newborns / / “ Basic science in modern medicine – 2018” Proceedings of a remote scientific and practical conference of young scientists . -P.603-606.
9. Aliev MM, et al. / Results of primary radical correction of children with anorectal malformation // Pediatrics, 2012, No. 1-2, pp. 60-63.
10. Nasir AA, Abdur -Rahman LO, Adeniran JO. Outcomes of surgical treatment of malrotation in children // Afr J Paediatr Surg. - 2011. - No. 8. - R. _ 8-11.
11. Raupov , F. S. (2020). Possible dysfunctions of the large intestine after resection in children. Problems of biology and medicine,(3), 119(18), 42-46.
12. Raupov , FS, & Kobilov , EE EVALUATION OF THE EFFECTIVENESS OF OZONE THERAPY FOR PURULENT SURGICAL INFECTION IN CHILDREN13.
13. Raupov , F. (2023). GISTOMORPHOMETRIC FEATURES OF THE DECA WALL IN LABORATORY WHITE RATS IN EARLY POSTNATAL ONTOGENESIS. International Bulletin of Medical Sciences and Clinical Research, 3(4), 76–81.

14. Raupov , F. S. (2022, September). Preventive measures of complications of colon resection in children in consideration of morphological features. In "ONLINE-CONFERENCES" PLATFORM (pp. 41-42).
15. Raupov , F. S. (2023). CLINICAL AND RADIOLOGICAL CHARACTERISTICS OF COLOSTASIS IN CHILDREN. American Journal Of Biomedical Science & Pharmaceutical Innovation, 3(05), 48-57.
16. Raupov , F., & Pardaev , F. (2023). THE SIGNIFICANCE OF CONCOMITANT PATHOLOGIES OF THE ORGANISM FOR THE CLINICAL COURSE OF CHRONIC RHINOSINUSITIS IN CHILDREN. International Bulletin of Medical Sciences and Clinical Research, 3(4), 66–69.
17. Teshaev Sh.Zh ., Khasanova DA Morphological parameters of the structures of the spleen of white rats in the norm and under the influence of a genetically modified product // Tibbiyotda Yangi- kun. - 2020. - No. 3 (31). - S. 744-747. (14.00.00; No. 22).
18. Teshaev Sh. Zh ., & Raupov F. S. (2022). SOME MORPHOLOGICAL ASPECTS OF OPTIMIZATION OF COLON RESECTION IN CHILDREN. International Journal of Medical Sciences And Clinical Research, 2(11), 42–46.
19. Cheung ST, Tam YH, Chong HM, Chan KW, Mou WC, Sihoe DY, Lee KH An 18-year experience in total colonic aganglionosis : from staged operations to primary laparoscopic endorectal pull-through. J.Pediatr . Surg 2009; 44: 12: 2352-2354.
20. Khamraev A.Zh. , Rakhmonov DB, Raupov FS // Fecal incontinence after repeated colon surgery in children. anatomical and physiological reflections / Problems of biology and medicine. 2020, No. 5 (122) S. 144-150.
21. Khamraev A.Zh. , Rakhmonov DB / Causes and tactics of surgical correction of postoperative insufficiency of the anal sphincter in children // Tashkent. Pediatrics. No. 2. 2019. From 90-96.
22. Maggie L. Westfal , Allan M. Goldstein / Diagnosing and Managing Hirschsprung Disease in the Newborn // J. Neo Reviews. -2018. Vol. 19, N.10.-P. 577-589.
23. Fouquet V., De Lagausie P., Faure C. et al. Do prognostic factors exist for total colonic aganglionosis with ieal involvement? J. _ Pediatr Surg 2002; 37: 71-75.
24. Fraser JD, Garey CL, Laituri CA, Sharp RJ, Ostlie DJ, St Peter SD Outcomes of laparoscopic and open total colectomy in the pediatric population. J Laparoendosc Adv Surg.Tech A 2010; 20: 7: 659-660.
25. Ergashev N. Sh. et al. / Anatomical forms and types of surgical correction of anorectal anomalies in children: // Bulletin of emergency medicine. - Tashkent, 2014. - N2. - pp. 133-134.