UDC 617.055-089.844

ANALYSIS OF THE TREATMENT RESULTS OF CHILDREN WITH COLON DISEASES SUBJECTED TO EXTENSIVE RESECTION

Raupov F.S.

Bukhara State Medical Institute

✓ Resume

Surgical correction of colon pathologies in most cases is a forced manipulation and is performed for some congenital and acquired diseases of the gastrointestinal tract (GIT) in children. Colon resection is a surgical procedure that involves the removal of a portion of a given organ. Such manipulations must be taken extremely seriously and carefully, any complications arising intraoperatively or after, can cause enormous damage not only to the patient's health, but also to his life.

Keywords: resection, large intestine, complications.

АНАЛИЗ РЕЗУЛЬТАТОВ ЛЕЧЕНИЯ ДЕТЕЙ С ЗАБОЛЕВАНИЯМИ ТОЛЬСТОЙ КИШКИ, ПОДЛЕЖАЩИМ ОБЩИМ РЕЗЕКЦИЯМ

Раупов Ф.С.

Бухарский государственный медицинский институт

✓ Резюме

Хирургическая коррекция патологий толстой кишки в большинстве случаев являются вынужденными манипуляциями и выполняются при некоторых врожденных и приобретенных заболеваниях желудочно-кишечного тракта (ЖКТ) у детей. Резекция толстой кишки — это хирургическая манипуляция, которое подразумевает удаление части данного органа. К таким манипуляциям необходимо отнести крайне серьёзно и осторожно, любые осложнения возникающее интраоперационно или после, смогут нанести огромный ущерб не только в здоровье больного, но и его жизни.

Ключевые слова: резекция, толстый кишечник, осложнения.

ЙЎҒОН ИЧАК РЕЗЕКЦИЯСИ ЎТКАЗГАН БЕМОР БОЛАЛАРДАГИ ЎЗГАРИШЛАР ТАХЛИЛИ

Раупов Ф.С.

Бухоро давлат тиббиёт институти

✓ Резюме

Болаларда йўгон ичак резекцияси кўпгина холларда мажбурий бажариладиган амалиёт хисобланиб, ошқозон-ичак тракти (ОИТ) аъзоларининг тугма ёки ортирилган касалликларини даволашда бажарилади. Йўгон ичак резекцияси — хирургик амалиёт бўлиб, ушбу аъзонинг маълум қисмини олиб танлаш билан кечади. Бу амалиётни бажариш жуда эҳтиёткорлик ва жиддий ёндошувни талаб қилади, чунки операция вақтида ёки ундан кейинги юзага келадиган асоратлар нафақат бемор соглигига, балким унинг ҳаётига хам катта зиён етказиши мумкин.

Калит сўзлар: асоратлар, йўгон ичак, резекция.

Relevance

Despite some success in the treatment of surgical pathologies of the gastrointestinal tract in children, the number of colon resections does not tend to decrease. [4,15,23,25]. In this regard, it is of great importance to study the consequences of such operations and analyze

possible postoperative disorders, developing in operated children [1,8,11,16]. The variety of functions of the large intestine predisposes the occurrence of various postoperative disorders of these functions, because it not only participates in the digestion of food, the formation of feces and

its excretion, but also participates in mineral metabolism, the absorption of the liquid part of the chyme, inhabiting microorganisms not only participate in the synthesis of some vitamins, but they can also lead to additional problems in the postoperative period [9,12,17,27].

The functional state of the remainder of the intestine largely depends on the volume of preservation of the colon, since the latter can play a significant role in the process of digestion and absorption. After colon resection, the patient's body undergoes significant pathophysiological changes [3,5,13,19,32]. In order to understand the pathophysiological changes occurring in the left part of the intestinal tube, it is necessary to know the processes occurring in a normally functioning gastrointestinal tract. Usually the colon slows down the passage of food masses, which also improves the absorption of nutrients [11,14,26,30]. Having overcome acute problems associated with maintaining water and electrolyte balance and meeting energy requirements, patients with extensive colon resections often face continuous diarrhea. The thing is, that excessive intake of carbohydrates into the colon can lead to osmotic diarrhea [6,8,31,33]. Large intestine resection leads not only to a decrease in the absorption capacity, but also to a rapid transit of food masses. Decreased absorption times also exacerbate nutrient deficiencies [9,11,18,35].

Currently, the tactics of managing sick children with suspected gastrointestinal pathology is unified in large medical centers. In most cases, the initial clinical manifestations of the disease are manifested by the picture of acute intestinal obstruction in the neonatal period [10,12,20,24,30]. At the same time, the tactics of surgical treatment is largely determined by the clinical situation and the tactics of surgical intervention largely depends on the competence of medical personnel. After performing bowel resections in children, the quality of life and rehabilitation is subsequently hampered by complications arising after this kind of surgery [20,22,34,36]. When performing surgical corrections in the gastrointestinal tract, including in the colon, various complications often arise in the patient's body, which can affect the quality of life of the latter, requiring rehabilitation. In this regard, the study of this problem is relevant [4,7,12,28,29].

Purpose of the study: Analysis of the results of treatment of colon pathology in children undergoing resection in order to study and improve the results of treatment.

Materials and methods

This work is based on the data of examination and treatment of 59 patients, including 33 (55.9%) boys, 14 (44.1%) girls, with surgical pathology of the large intestine, who received surgical treatment in the clinical base of the Department of Pediatric Surgery of the Bukhara State Medical Institute, in the period 2014-19. Of the 59 examined patients, 31 (52.5%) anorectal malformations were found that required partial resection of the colon (high and fistulous forms of atresia ani et rekti), Hirschsprung's disease was found in 14 (23.7%) patients, acute intestinal obstruction due to blind-colonic intussusception in 4 (6.8%) patients, dolichosigma in 3 (5.1%) patients, congenital intestinal obstruction with total agangliosis (disease Sulzer-Wilson) at 1 (1.7%) sick and subsegmental agangliosis of the colon in 2 (3.4%) patients, Payer's disease in 2 (3.4%) patients, total polyposis in 1 (1.7%) patients, post-traumatic colon resection in 1 (1.7%) patients, and partial colon resection in the presence of adhesive disease 1 (1, 7%) patients. All patients underwent emergency or routine intervention, depending surgical on manifestation of these pathologies.

Results and discussion

We carried out clinical laboratory and X-ray studies in 59 patients. To study the pathology of the colon, a survey radiography and irrigography were performed at the time of filling and after emptying, in various positions of the patient to study fixations and pathological displacements of the colon. To determine anomalies of the anorectal region, the method for determining the level of atresia of the rectum and anus according to Vangestin was used. The tactics of surgical treatment were based on the level of atresia, the presence or absence of fistulas in adjacent organs. When diagnosing a high form of atresia ani et recti (with and without fistula), in 24 (77.4%) cases, 24 sigmoidostomy was imposed, the stoma was eliminated at an older age, and the colon was partially resected with subsequent transanal reduction according to Romuald-Rebijn, in 7 (32, 64%) patients underwent simultaneous abdominal-perineal proctoplasty. In 14 (82.4%) patients with Hirschsprung's disease, abdominal-perineal proctoplasty was performed using the Saave-Bale method, while subtotal colectomy was performed in 2 patients, and total colectomy in one patient. Transanal descent and removal of the aganglian part of the large intestine according to Delatore-Mandragona was used in 3 (17.6%) patients. In 3 (5.1%) patients with dolichosigma and Payer's disease, 2 (3.4%) patients underwent partial resection with an endto-end anastamosis.

In addition, patients with diagnoses of total polyposis in 1 (1.7%) patients, post-traumatic resection of the large intestine in 1 (1.7%) patients, and partial resection of the colon against the background of adhesive disease 1 (1.7%) underwent surgery. sick. The decisive factors here were the data of irrigography and the clinical and functional state of the colon. Only those sick children who had pronounced signs of lengthening of the colon, kinks, impaired patency and fixation were subject to surgical treatment. The operations were aimed at eliminating the lengthened type of the colon or aganglionic zone, by removing a significant part of it, which makes it possible to create optimal conditions for the functioning of the part of the colon remaining after resection and, in most cases, leads to normalization of the stool.

In the postoperative period, for 5-6 days, patients were kept on parenteral nutrition, nutritional support was carried out taking into account the body's needs for food ingredients and fluids. The need of the patient's body for fluids subtracted taking into account the physiological needs, fluid, current pathological losses and volume replenishment. For the prophylactic purpose of possible postoperative complications from the postoperative wound and to prevent sepsis, all operated patients were prescribed IV-generation cephalosporins. intravenous metrogil and macrolides in agerelated dosages, taking into account the etiology of possible causative agents of surgical infection. To stabilize the microbiocenosis in gastrointestinal tract (GIT), probiotics eubiotics were prescribed, taking into account clinical and laboratory parameters. Prescribed the drug "Lactofiltrum" for detoxification and removal of toxins from the gastrointestinal tract. In all observed patients, postoperative wounds in the abdominal wall healed by primary intention.

From local complications in the early stages after surgery according to the Soave-Bale method perianal skin lesions were significant. This complication in all children was mainly associated with an increased frequency and consistency of stools and in a number of observations was explained by the course of postoperative enterocolitis. **Inflammatory** complications developed in 2 children against the background of maceration. Transient fecal incontinence was observed in 2 (0.5%) patients up to 4 weeks after surgery. The restoration of the passage took place starting from 3-5 days after the operation, but rather high - from 10 to

20 times a day during the first 6 months after the operation. In terms of more than 6 months after the operation, the frequency of stools remained quite frequent: up to 7-15 times a day. Frequent liquefied stool as a manifestation of post-colectomy syndrome was combined with stool liquefaction against the background of infectious enteritis.

The latter had a recurrent character, arose as a result of viral and bacterial infections, dysbiosis in 7 (22.6%) children. From local complications in the early stages after Soave-Bale operation peri-anal skin lesions were significant. This complication in all children was mainly associated with the frequency and consistency of stools and in a number of observations was explained by the course of enterocolitis. Inflammatory complications developed in 2 children against the background of maceration. Transient fecal incontinence was observed in 27 (87.1%) patients within 4 weeks after surgery. In the long-term period, liquid stool incontinence persisted for up to 6 months. in 9 (29%) children, in terms of more than 1 year, incontinence of frequent loose stools was noted in 4 (12.9%) children.

When analyzing the complications that arose in the postoperative period, the following was found: in the postoperative period, most patients had frequent, liquid, unformed stools, sometimes dark green, which indicated a violation of the symbiosis of the intestinal microflora. And also in patients in the postoperative period, there was at times anxiety, moodiness, decreased appetite, sometimes refusal to eat, which influenced the quality of life of patients.

There was a lag in physical development, in some cases depletion of the body, sometimes leading to cachexia, which required additional prescription of parenteral nutrition drugs against the background of complex treatment. Of the local complications, maceration of the anorectal skin was most often noted. Some patients developed progressive stenosis of the anus, who had to do devulsion against the background of stimulation therapy. In patients undergoing abdominal-perineal proctoplasty, a frequent complication was weakness of the anal sphincter muscles, against which clinical signs of partial fecal incontinence were found.

Conclusions

1. Analysis of the results obtained shows that surgical interventions performed on the large intestine by traditional methods have drawbacks, which lead to complications that reduce the quality of life of sick children.

- 2. Improvement of methods of surgical interventions taking into account the anatomical and physiological characteristics of a growing organism allows to reduce the number of complications, which leads to an improvement in the quality of life of sick children.
- 3. Timely, targeted prescription antibacterial drugs and infusion therapy in the postoperative period reduces the possibility of complications, including surgical infection in the postoperative wound and sepsis.

LIST OF REFERENCES:

- Averin V.I. et al. (2015). Anorectal malformations in children (federal clinical guidelines): scientific publication. Pediatric Surgery. 19; 4: 29-35.
- Akilov Kh.A., Saidov F.Kh. Complicated forms of chronic colostasis in children in urgent surgery. Orenburg Medical Bulletin, (2015) III (3 (11)), 6-7.
- Akhparov N.N. Selected issues of pediatric coloproctology // Almaty, 2018.-224p .; silt
- 4. Aliev MM, et al. Results of primary radical correction of children with anorectal malformation. // Pediatrics, 2012, No. 1-2, pp. 60-63.
- Razumovsky A.Yu., et al. Hirschsprung's disease in children: / a guide for doctors /A.Yu. Razumovsky, A.F. Dronov, A.N. Smirnova, V.V. Kholostovoy.-M GEOTAR-Media, 2019. -368 p.: ill.
- Vorobey A.V., et al. Hirschsprung's disease in children and adults. / Under the general editorship of A. V. Vorob'ya // A.V. Vorobey et al. - Minsk: Stroy Media Project, 2016.-252 p.: ill.-ISBN 978-985-7091 -80-5.
- Geraskin A.B. Pediatric coloproctology: a guide for doctors / AB Geraskin, A.F. Dronov, AN. Smirnov. - Moscow: Content, 2012.
- Kirgizov I.V. Assessment of the quality of life of children with defecation disorder / I.V. Kirgizov, AB Linnik et al. // Pediatric surgery. - 2011. - No. 2. - S. 21-23.
- 9. Ibodov Kh.I., Ubaydulloyev V.R. Microcirculatory disorders anal insufficiency in children // Health Tajikistan -2017, №2. -S 52-57.
- 10. Ionov A.L. Acquired stenosis of the anus and rectum in children. // Autoref. diss. doc. honey. sciences. M., 2011.S.- 24.
- 11. Lyonyushkin, A.I. Pediatric coloproctology: a guide for doctors / A.I. Lyonyushkin, I.A. Lyonyushkin. - SPb .: SPb. GPMA, 2008.-122

- 12. Raupov F.S. Large intestine resection and possible postoperative complications in children. / Raupov FS // New Day in Medicine. - 2020. №1 (29). - pp. 329-331.
- 13. Raupov F.S. Possible dysfunctions of the large intestine after resection in children // Problems of Biology and Medicine. - 2020. -No. 3 (119). - S. 78 - 81.
- 14. Svarich V.G., Kirgizov I.V. Assessment of the quality of life of children operated on for Hirschsprung's disease. // Evidence-based gastroenterology. 2015. T. 4. No. 3-4. S. 3-8.
- 15. Khamraev A. Zh., Atakulov Zh.A. Bolalar colorectal surgery T. Ed. Ukituvchi "nashriet - Matbaa izhodiy uyi. 2015. C-383.
- 16. Khamraev A.Zh., Raupov F.S. Extensive colon resection in children, problems and possible solutions // Bulletin of the Association of Doctors of Uzbekistan. -2020. No. 3 (100). - S. 125 - 130.
- 17. Khamraev A.Zh., Karimov I.M. Khamroev U.A., Ollonazarov Zh.O. Rehabilitation of children with anorectal malformations. Russian Bulletin of Pediatric Surgery, Anesthesiology Reanimation. and Materials of the congress of pediatric surgeons of Russia. 2015 p 153.
- 18. Khamraev A.Zh., Rakhmonov D.B., Raupov F.S. Fecal incontinence after repeated colon surgeries in children. Anatomical and physiological reflections // Problems of biology and medicine. - 2020. - No. 5 (122). - S. 143 -150.
- 19. Khamraev A. Zh., Atakulov Zh.A. / Bolalar colorectal surgery. T. Ed. "Ukituvchi" nashriet- Matbaa izhodiy uyi. 2015. C-383.
- 20. Khamraev A.Zh., Ergashev B.S. / Transanal endorectal reduction of the large intestine in the treatment of Hirschsprung's disease in children under three years of age // Bulletin of the Association of Physicians Uzbekistan. T.: 2018. No. 3.P.100-104.
- Khamraev A. Zh., Raupov F.S. / Extensive colon resection in children, problems and possible solutions. // Bulletin of the Association of Doctors of Uzbekistan. Tashkent. 2020. No. 3 (100) S. 125-130.
- 22. Khamraev A.Zh., Raupov F.S., Rakhmanov D.B., Kuldoshev F.M./Tactical approaches for repeated operations on the colon in children // Bulletin of the Association of Doctors of Uzbekistan. Tashkent. 2021 No. 1 (102). S. 53-57.
- 23. Kholostov, V.V. et al. / Postcolectomy syndrome in children // Russian bulletin of pediatric surgery, anesthesiology resuscitation. -2015. - No. 10. -S. 100-106.





- 24. Ergashev N. Sh. Et al. / Anatomical forms and types of surgical correction of anorectal anomalies in children: // Bulletin of emergency medicine. Tashkent, 2014. N2. S. 133-134
- 25. Shamsiev A.M., Atakulov J.A. et al. Hirschsprung's disease in children, Tashkent: publishing house of medical literature named after Abu Ali ibn Sino, 1997. P-278.
- 26. Andrea Bischoff, Jason Frischer, et all. Damaged anal canal as a cause of fecal incontinence after surgical repair for Hirschsprung disease—a prevented table and under reported complication // J. Pediatr. Surg. Int-2017.Vol. 52. P. 549–553.
- 27. Barenna S., Andres A.M., Burgos L., Luis A.L., Hernades F., Martinez L., Lopez Santamaria M.,Lassaletta L.,Tovar J. A.,Longterm results of the treatment of total colonic aganglionosis with two different techniques. Eur J Pediatr Surg 2008, 18:6: 375-379.
- 28. Brunner M., Cui Z., Matzel K.E. (2016) Sacral nerve stimulation for faecal ncontinence in patients with sacral malformation. Int J Colorectal Dis. https://doi.org/10.1007/s00384-016-2748-6.
- 29. Cheung S.T., Tam Y.H., Chan K.W., Mou W.C., Sihoe D.Y., Lee K.H. An 18-year experience in total colonic aganglionosis: from staged operations to primary laparoscopic endorectal pull trough. //J Pediatr Surg 2009; 44: 12: 2352-2354
- 30. Maggie L. Westfal, Allan M. Goldstein. / Diagnosing and Managing Hirschsprung Diseasein the Newborn // J.Neo Reviews.-

- 2018. Vol. 19, N. 10.-P. 577-589.
- 31. L. Lagares-Tena., L. Millán-Paredes, L. Lázaro-García, A. Navarro-Luna, S. Delgado-Rivilla, A. Muñoz-Duyos. Sacral neuromodulation in patients with congenital faecal incontinence. Special issues and review of the literature. Received: 26 June 2017 / Accepted: 5 August 2017. Springer International Publishing AG, part of Springer Nature 2018.
- 32. Lagares-Tena L., Corbella-Sala C., Navarro-Luna A., Muñoz-Duyos A. (2017) Sacral neuromodulation in a faecal incontinence patient with unknown sacral partial agenesis. Colorectal Dis19 (5): 502-504. Https://doi.org/10.1111/codi.13661.
- 33. Luis De la Torre, Kimberly Cogley, Karla Santos, Otto Moralesa, Juan Calistoa. / The anal canal is the fie line between "fecal incontinence and colitis" after a pull-through for Hirschsprung disease // Journal of Pediatric Surgery.-2017. Vol. 52, P. 2011-2017.
- 34. Pena A., Bischoff A. Surgical Treatment of Colorectal problems in Children. Springer, Switzerland 2015.
- 35. Fouquet V., De Lagausie P., Faure C., et al. Do prognostic factors exist for total colonic aganglionosis with ileal involvement? .J Pediatr Surg. 2002; 37: 71-75.
- 36. Fraser J.D., Garey C. L., Laituri C.A., Sharp R. J., Ostlie D.J., St Peter S.D. Outcomes of laparoscopic and open total colectomy in the pediatric population // J. Laparoendosc Adv Surg Tech A 2010; 20: 7: 659-660.

Entered 09.04. 2021