The Optimum Surgical Methods at Disease Hirschsprung’s in Adults.

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Annotation.
Objectives. The Purpose: perfect the results of the surgical treatment disease Hirschprung’s (DH) in adult operations with using abdominally -anal resection of the rectum with voiding functionning division of the colon in anal channel.

Materials and Methods. On the base 1- Republican hospitals on department Coloproctology M Ruz in Tashkent were a studied results of the diagnostics and treatments 86 sick BG at age from 15 and senior years.

Results: The developed modification of the peritoneal-anal resection of the rectum with pulling through improves results of treatment of the patients with Hirschprung’s disease and allows to achieve good (85 %) and satisfactory (11 %) results.

Keywords. hypogangliosis, agangliosis, megacolon.

Relevance
Hirspurgn Disease (HD) is one of the common colon azitia anomalies. There are no accurate data on the global prevalence of Hirspurgn disease. According to epidemiological studies conducted worldwide, it can be estimated that the incidence of Girspurgn disease is approximately 1 case per 1,500-7,000 newborns[1,2,3].

Hirsprung Disease (HD) is one of the common colon rasitis anomalies. There are no accurate data on the global prevalence of Hirspurgn disease. According to epidemiological studies conducted worldwide, it can be estimated that the incidence of Hirspurgn disease is approximately 1 case per 1,500-7,000 newborns[4,5,11]. The low number of clinical observations became an obstacle to the study of the features of the clinical course of Hirspurgn disease in adults, its dependence on morphological changes of the colon wall and the development of a common treatment tactic depending on the prevalence of megacolon and the nature of complications. All these problems require further research aimed at studying the features of the structure of the intramural nervous system of the distal colon departments in adults, Identifying the relationship of clinical manifestations of anomalies and degree of structural changes in the colon wall, as well as solving tactical problems in the treatment of this disease. [9,10]

Issues of pre-operative training and operational tactics in the case of Hirspurgn’s disease continue to be contentious. There is no unanimity in the choice of the method of radical correction of defect depending on the stage of clinical flow, anatomical form and age of the patient [6,7,8]. Features of the disease flow, its dependence on morphological changes of the colon wall, diagnosis and treatment tactics, frequent complications and functional disorders in the postoperative period in adult patients require further study.

Materials and Methods.
Under supervision there were 86 patients with Girsprung disease older than 15 years, who received inpatient treatment on the basis of RCB 1 in the department of coloproctology MH RUz in 1993-2023. Of these, 62 (72%) are men and 26 (30.2%) are women. В возрасте 15-19 лет был 21 (24,4%) больной, 20-24 лет – 34 (39,5%), 25-29 лет – 18 (21%), 30 лет и старше – 5 (5,8%). The diagnosis of BG is based on the clinical picture and survey data. We developed a screening scheme and diagnostic algorithm to differentiate Hirspurgn disease from other megacolon species. Patients were divided into two groups according to the type of operational allowance. The first group (basic) includes 32 (37.2%) patients who have had abdominal-anal rectal resection with the deposition of proximal sections of the colon into the anal
canal. The second (control) group includes 54 (62.8%) patients who have undergone Duhamel surgery in modifications. 12 patients, including 2 basic and 10 control groups, received surgical treatment in two stages.

According to the results of irrigation, 72 (83.7%) rectal form (16.3%) of Girsprung disease was found among the observed patients. Morphological studies played a crucial role in determining the pathogenesis of Hirschsprung disease. Significant advances in the study of Hirschsprung disease are due to the introduction of the morphological study of full-layer bioplates of colon wall segments described by Swenson. In this regard, the Swenson rectal studies, with a special focus on nerve fibers and endocrine cells combined with morphometric studies of the rectal wall, will help answer the above questions. In our study, 52 (60.4 per cent) of the 86 patients were affected. According to the results of the study of the biopsy material, agangliosis was diagnosed in 3 (5.7%), hypogangiasis in 49 (94.2%) patients. Morphometric studies have shown that the mucous membrane almost doubles, the subsonic layer is more than 1.5 times thicker than the muscle layer.

Results and discussion

Pre-operative training, operative treatment, choice of access and scope of operative intervention in Hirschsprung disease in adults are not fully developed. In our opinion, for each adult patient with Hirschsprung disease, individual tactics should be chosen depending on the time of preparation for the radical surgery, the duration of the post-operative period, the duration and the degree of post-operative rehabilitation.

In order to improve the results of treatment of Girsprung disease, we analyzed the causes of unsatisfactory results of traditional surgical methods. Considering the unsatisfactory remote functional results of treatment in the control group of patients (failure of rectal cult - 3 (5.5%), necrosis and retraction of the lower intestine - 5 (9.2%), abscess of the pelvic cavity - 3 (5.5%), peritonitis - y - 2 (3.7%)), since 2002, on the basis of the above-mentioned literary data, its own clinical experience and the results of neuromorphological research of the macro-eparates of the colon, a new modified method of surgical treatment - abdominal - has been proposed and introduced anal rectal resection with the lowering of functioning proximal colon departments (patent on inventions from the Intellectual Property Agency of the Republic of Uzbekistan IAP 05140 from 17.12.2015) (Fig.1)

![Fig. 1 Steps of abdominal-anal rectal resection with inference.](image)

*Note: A - Mobilization of the rectum on the abdominal side. B - the deposition of proximal portions of the colon with excess and drainage of the presacral region. B - cutting off the excess of the lower intestine with the addition of a coloanal anastomosis.

One-stage surgical treatment was performed in 72 (83.7%) adult patients with Hirschsprung disease: 32 (44.5%) of which BAR rectum was performed with the reduction of proximal sections of the colon into the anal canal with the introduction of colon anal anastomosis (1st group, main); 54 (62.8%) - Duhamel’s operation in modification (2nd group, control). Twelve (14.6 per cent) patients (2 primary and 10 control groups) underwent multi-stage surgical treatment. It not only improved the general condition of the patients,
eliminated intestinal obstruction, but also kept part of the colon during the main phase of the operation. The duration of the second stage of surgical treatment was 6-18 months and depended mainly on the general condition of the patient, the presence or absence of inflammatory changes in the rectum, the condition of proximal sections of the colon, which required multiple-stage treatment.

The nearest results of the surgical treatment of adult patients with Hirsprung disease were evaluated during their stay at the clinic after the operative treatment. Postoperative complications were noted in 18 (22 per cent) patients (4 in the main and 14 in the control group). Late postoperative complications after BAR of the rectum were seen in 8 (9.8%) patients; 2 (25%) of them had partial stricture of the lower intestine. After Duhamel’s surgery, complications in the form of stricture of colorectal anastomosis developed in 6 (75%) patients.

In our work, we compared the effectiveness of the traditional approach to treating Hirsprung disease - Duhamel surgery (control group) and abdominal anal resection of the rectum with niveda (core group). For example, in the main group patients the duration of surgery and the length of stay in the hospital were 1.2 and 1.8 times less, respectively, and the peristalsis normalized 1.7 times faster than in the control group. Analysis of the functional results of the operations with additional criteria showed better results in the main group; these patients showed more positive dynamics of the near and distant results. For example, in the main group, a year after surgical treatment, the number of patients with differential urge to defecate was 1.4 times higher than in the control group.

In the main group (after rectal BAR surgery) after 12 months, the number of patients with unsatisfactory results decreased from 7.7% to 4.5%. At the same time, the number of good (69.2%) and satisfactory (23.1%) results increased from 23.1% to 85%.

According to the results of the survey using the incontinence scale Wexner (1993), the average score in the main group was 4.1 (1-13), in the control - 6.3 (1-12). An unsatisfactory result, that is, more than 4 points, was recorded in 2 (7.7%) patients who underwent rectal BAR surgery. After the Duhamel method, 9 (25.7%) patients had more unsatisfactory results.

Thus, when diagnosed with Hirsprung disease, the most effective method of surgical treatment is abdominal-anal resection of the rectum with the lowering of functioning proximal sections of the colon into the anal canal with hypo-anal removal or the Aganglionar site and the extended non-functioning sections of the colon.

Conclusions

1. The developed algorithm of diagnostics of Hirsprung disease in adults allows you to correctly determine the diagnosis and choose the method of surgery. Irrigoscopy is the main method of diagnosis of Hirsprung disease in adults (superanal form is found in 87.8%, rectal - in 12.2%). The biopsy of Swenson in all 50 observations confirmed the diagnosis (Agangliosis -6%, hypohagenosis - 94%).

2. Abdominal-anal rectal resection with the lowering of functioning proximal colon sections into the anal canal simplifies the procedure compared to the Duhamel method and eliminates the hypo- or agangliosis zone.

3. After the application of the method of abdominal-anal resection of the rectum with inferior results, the unsatisfactory result decreased from 7.7 to 4.5%. At the same time, the number of good (69.2%) and satisfactory (23.1%) results increased from 23.1% to 85%.

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