Volume 2, Issue 10, October 2024 ISSN (E): 2938-3765

THE ROLE OF MINIMALLY INVASIVE TECHNOLOGIES IN THE COMPLEX TREATMENT OF PERITONITIS

Berdiev Ergash Abdullaevich
Candidate of Medical Sciences, Associate Professor
Tashkent Medical Academy Republic Children's Minimally Invasive and Endovisual Scientific-Practical Center Uzbekistan. Tashkent

Atakov Sarvar Sultanbaevich
Candidate of Medical Sciences, Associate Professor

Mukhidinov Abdulla Umidilloevich
Department Assistant Tashkent Medical Academy
Uzbekistan. Tashkent

Abstract
The article presents the experience of complex treatment of children with peritoneal adhesions. During the period of 2010-2023, 96 patients with obvious pain syndrome on the background of peritonitis were operated on. Of these, 48 had obvious peritoneal adhesions, and in order to facilitate a complete videoendolaparoscopic adhesiolysis surgery, a centrally created fibrinolytic mixture was injected into the abdominal cavity before surgery; (composition of fibrinolytic mixture: heparin 10000 ED+ fibrinolysin 20000 ED+ hydrocortisone 125mg+ gentamicin 80mg+ novocaine 0.25%-200ml), and schemetreatment procedures were carried out. Complications and their recurrence were not observed after the operation.Endovideolaparoscopic technologiesAll patients who underwent surgery were activated early and had an average of 3.7 days of inpatient treatment.

Keywords: Adhesion disease, children, prevention, videolaparoscopic adheziolysis.

Introduction

Relevance of the problem:

Practicing surgeons in their experience often encounter clearly developed adhesions during repeated abdominal surgeries. In the literature, there are many examples of the use of videoendolaparoscopic technologies in the treatment of adhesions, but even so, the possibility of videolaparoscopic adhesiolysis in this case depends on the degree of development of adhesions in the abdominal cavity. During endovideolaparoscopic surgery, surgeons have difficulty inserting the first trocar into the abdominal cavity. The condition of rough adhesions in the abdominal cavity causes the limitation of the general view of the operating field, and as a result, the position of the

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

anatomical location of the organs in the abdominal cavity changes {1, 2}. After abdominal surgery, it causes the following conditions:

According to the classification of O.I. Blinnikov

- IV-level of the state of diffuse connections;
- necrosis of intestinal membranes due to acute intestinal obstruction;
- close adhesion of intestinal loops with peritoneum;
- when there are technical complications during the operation (massive bleeding, opening of the intestinal loop, incomplete adhesiolysis in dense rough adhesions).

Using endovideolaparoscopic technologies, there are no technical difficulties in the separation of membranous visceroparietal adhesions in the abdominal cavity, but in the process of removing visceroparietal and viscerovisceral adhesions, due to iatrogenic damage, complications such as intestinal perforation or profuse bleeding from the intestinal walls can be observed {3, 5, 6}. FLA has a pathogenetic effect against adhesive processes in the abdominal cavity, causing the absorption of its main component - collagens. As a result, dense adhesions change their fibrous consistency to a gel-like state, their separation during surgery makes it possible to perform the operation in a less traumatic and technically better way.

Purpose of work: study of the effectiveness of using endovideolaparoscopic technologies in the innovative complex treatment of abdominal adhesion disease.

Material and Methods:

During the years 2010-2023, 96 patients with obvious pain syndrome on the background of peritoneum adhesion disease were operated on at the Republican Low Invasive and Endovisual Scientific-Practical Center. Patients were routinely prepared for endovideolaparoscopic surgery using complaints, medical anamnesis, clinical presentation data, and other additional examination methods confirming the presence of peritoneal adhesions in the patient (x-ray examination of the gastrointestinal tract with passage of barium sulfate solution, colonoscopy, polypositional UTT). A general x-ray of the abdomen usually does not provide complete information about the process of adhesions, but according to these x-ray images, it is possible to think about the degree of deformation of the intestinal tubes and its condition, and the violation of the passage of intestinal products. Nowadays, UTT is one of the modern instrumental tests. With the help of ultrasound, it helps to determine the safe zone where the first trocar is inserted into the abdomen and creates a pneumoperitoneum.

Videoendolaparoscopic surgery was performed in 48 patients, in which treatment procedures were carried out schematically with FLA solution in the operation site and in the last periods after the operation. In the anamnesis, 1 repeat operation was performed in 18 patients, 2 repeat operations in 9 patients, and 3 repeat operations in 1 patient. We carried out 10 sessions of electrophoresis with KJ, lidase 64 with ED and treatment physical education courses in the area of the anterior abdominal wall after surgery.

Depending on the morphological structure of the adhesions, it was found that there was a mixed type (in 14 cases), solid type in 6 patients, cobweb coating in 4 patients, severe adhesions in 5

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

patients. In five cases, it was found that cord-like attachments of the small intestinal loop up to 5.0 cm in length were clearly developed.

Intraoperative complications in the form of profuse bleeding or intestinal perforation were not observed during videoendolaparoscopic surgery. No complications were observed in the postoperative period.

Results and Discussion:

In the application of videoendolaparoscopic technologies in the case of adhesions of the peritoneum, the responsible place is to correctly determine the point of insertion of the Veresh needle for the formation of pneumoperitoneum in the abdominal cavity and the introduction of the first trocar. Usually visceroparietal adhesions are formed in the area of the operative scar, the point of insertion of the Veresh needle should be away from this area. If the patient has previously undergone an appendectomy using the McBurney, Volkovich-Dyakonov method, a laparoscopic trocar is inserted from the paraumbilical area and a pneumoperitoneum is formed. If patients have undergone mid-mid or low-mid laparotomy surgery, the most convenient point in such cases islinea alba will be the opposite side of the McBurney point with respect to . If there are adhesions here, for example, left after abdominal drainage, a similar scar-free area from the anterior abdominal wall is selected. The Veresh needle is held perpendicular to the abdominal wall and slowly inserted into the abdominal cavity layer by layer. Correct insertion of the Veresh needle into the abdominal cavity is determined using the insufflator scale.

Videolaparoscopy is also performed "open" due to rough postoperative scars. In this case, the anterior wall of the abdomen is cut layer by layer, the size of one finger is opened, and the trocar is inserted, searching for space with the finger. Videolaparoscopic adhesiolysis surgery can be performed by observing the location and development of adhesions in the abdominal cavity during general videolaparoscopy. In the process of opening adhesions, scissors and dissector instruments are additionally inserted into the abdominal cavity. Adhesions are gradually separated using less bipolar and monopolar coagulations.

Videolaparoscopic prevention of adhesions. The operation of adhesiolysis is completed by suctioning out blood and clots from the abdominal cavity. In order to reduce the process of inflammation and adhesions, FLA solution is injected into the abdominal cavity. In order to improve intestinal motility, 0.5% novocaine is injected into the mesentery of the small intestine with a long puncture needle. Obvious signs of inflammation in the abdominal cavity lead to rapid deterioration of the functional state of vital organs and systems and indicators of coagulogram, pronounced hyperfibrinogenemia and difficulty in fibrinolysis.

These data once again testify that less invasive operative methods are necessary for the purpose of early prevention of abdominal adhesion disease. FLA dissolves fibrin threads, normalizes fibrinolysis, and most importantly prevents the formation of adhesions. Videolaparoscopic adhesiolysis of the abdominal cavity with FLA reduces the concentration of fibrinogen and normalizes fibrinolysis, which is a reliable method in the postoperative period and early prevention of adhesion disease in children.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

The development of videolaparoscopy expands the possibilities of treating peritoneal adhesions. According to our data and other clinics dealing with this problem, videolaparoscopy is an innovative and effective method in the treatment and prevention of peritoneal adhesions.

Summary

1. Preparing patients with peritoneal adhesions for surgery with the developed method significantly reduces the time of adhesiolysis.
2. The videolaparoscopic method prevents the formation of adhesions in the early postoperative periods, and provides a good cosmetic effect.
3. Treatment and prevention of peritoneum adhesion disease by endovideolaparoscopic and drug method shortens the postoperative rehabilitation period and reduces the frequency of recurrence.

References:

1. Ivanov V. V., Smolentsev M. M., Kinarov A. G. Mesto endovideo-surgical methods and treatment of acute spaechnoy intestinal obstruction and detey. Children's surgery. 2012; 3: 13–14.
2. Izbasarov R. J. Laparoscopic adgeziolysis and lechenii acute spaechnoy intestinal obstruction. Endoscopic surgery. 2013; 2: 28–30.
3. Shapovaliants S. G., Larichev S. E., Timofeev M. E. Laparoscopic intervention in acute spachnoy tonkokishechnoy neprokhodimosti. Endoscopic surgery. 2013; 4: 3–8.
4. Timofeev M. E., Fyodorov E. D., Bachurin A. N. Laparoscopic resolution of acute spachnoy tenkokishechnoy neprodimosti, the cause of which is the use of earlier laparoscopic appendectomy. Endoscopic surgery. 2014; 1: 48–51.
5. Eeson GA, Wales P., Murphy JJ Adhesive small bowel obstruction in children: should we still operate? J Pediatr Surg. 2010 May; 45 (5): 969–74. Doi: 10.1016/j.jpedsurg.2010.02.030.
6. Timothy B. Lautz, MD, Mehul W. Raval, MD, Marleta Reynolds, MD, Katherine A. Barsness. Adhesive Small Bowel Obstruc tion in Children and Adolescents: Operative Utilization and Factors Associated with Bowel Loss. Journal of the American College of Surgeons. 2011 May; 212 (Issue 5): 855–861.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5