

# RECONSTRUCTIVE AND RECONSTRUCTIVE INTERVENTIONS AFTER HARTMANN SURGERY: PROBLEMS AND SOLUTIONS

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## ✓ Resume

In this article, the results of reconstructive operations to restore natural intestinal continuity in patients who had previously undergone Hartmann surgery were studied. Restoring the continuity of the colon after a Hartmann-type operation is a complex surgical intervention.

The method of restoring intestinal continuity is determined individually in each case, depending on the length of the rectal stump, diastasis, the severity of cicatricial-adhesive processes, as well as the experience of the surgeon. The results of surgical treatment of 92 patients who underwent reconstructive and reconstructive operations were analyzed.

The diseases for which resection was performed with the imposition of a colostomy are distributed as follows: cancer of the sigmoid and rectum, their traumatic ruptures; inversions; perforations; sigma diverticulosis; intestinal necrosis caused by venous thrombosis. The timing of the restoration of continuity depends on the reasons that led to the resection and the imposition of the stoma.

With malignant tumors – not earlier than 8-9 months – 1 year. It is better to put the end of the anastomosis in the side – terminolateral, using median laparotomy.

Keywords: Hartmann's operation, restoration of accommodation, colon, colostomy.

# РЕКОНСТРУКТИВНО-ВОССТАНОВИТЕЛЬНЫЕ ВМЕШАТЕЛЬСТВА ПОСЛЕ ОПЕРАЦИИ ГАРТМАНА: ПРОБЛЕМЫ И ПУТИ РЕШЕНИЯ

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## √ Резюме

В данном статье были изучены результаты реконструктивных операций по восстановлению естественной кишечной непрерывности у больных, перенесших ранее операцию Гартмана. Восстановление непрерывности ободочной кишки после операции типа Гартмана является сложным оперативным вмешательством.

Способ восстановления непрерывности кишечника определяется в каждом случае индивидуально в зависимости от длины культи прямой кишки, диастаза, выраженности рубцово-спаечных процессов, а также опыта хирурга. Проанализированы результаты хирургического лечения 92 больных, которым были выполнены реконструктивновосстановительные операции.

Заболевания, по поводу которых была выполнена резекция с наложением колостомы, распределены следующим образом: рак сигмовидной и прямой кишок, их травматические разрывы; завороты; перфорации; дивертикулез сигмы; некроз кишки, обусловленный венозным тромбозом. Сроки восстановления непрерывности зависят от причин, которые привели к резекции и наложению стомы.

При злокачественных опухолях — не ранее 8–9 месяцев — 1 года. Анастомоз лучше накладывать конец в бок — терминолатеральный, используя срединную лапаротомию.

Ключевые слова: операция Гартмана, востановительная вмещательства, ободочная кишка, колостома.





# ГАРТМАНА ОПЕРАЦИЯСИДАН КЕЙИН РЕКОНСТРУКТИВ ВА РЕКОНСТРУКТИВ АРАЛАШУВЛАР: МУАММОЛАР ВА ЕЧИМЛАР

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### √ Резюме

Ушбу маколада илгари Гартманн операциясини ўтказган беморларда табиий ичак узлуксизлигини тиклаш бўйича реконструктив операциялар натижалари ўрганилди. Нагттапп типидаги операциядан кейин йўгон ичакнинг давомийлигини тиклаш мураккаб жаррохлик аралашувидир.

Ичак узлуксизлигини тиклаш усули хар бир холатда ректал томирнинг узунлигига, диастазга. сисатрисиал-ёпишқоқ жараёнларнинг огирлигига, шунингдек жаррох белгиланади. тажрибасига қараб алохида Реконструктив ва реконструктив операцияларни ўтказган 92 нафар беморни жаррохлик йўли билан даволаш натижалари тахлил килинди.

Колостомия билан резекция қилинган касалликлар қуйидагича тақсимланади: сигмасимон ва Ректум саратони, уларнинг шикастли ёрилиши; инверсиялар; тешиклар; сигма дивертикулози; веноз тромбоз туфайли келиб чиккан ичак некрози. Узлуксизлигини тиклаш вақт резекциён ва stoma солишга сабаб сабабларга боглиқ.

Хавфли ўсмалар билан-8-9 ойдан илгари емас-1 йил. Анастомознинг охирини медиана лапаротомия ёрдамида ён терминолатерал томонга кўйиш яхшидир.

Калит сўзлар: Гартманн операцияси, тикловчи аралашув, йўгон ичак, колостомия тиклаш.

## Relevance

M odern coloproctology is currently one of the most progressive areas in surgery. The trends towards the growth of minimally invasive interventions and an increase in the volume of surgical treatment have been clearly traced over the past two decades. At the same time, the principle of multi-stage operations with preventive colostomy remains unchanged, and the frequency of emergency surgical interventions on the colon, culminating in the formation of various colostomas, reaches 60%.

Despite the ongoing discussions about surgical tactics in complicated forms of cancer and other acute diseases of the left half of the colon, to date, the operation of choice is the Hartmann operation. The frequency of its implementation in the complicated course of the underlying disease, according to different authors, ranges from 37% to 62% [1; 31; 46; 51; 72; 85; 98; 134; 149; 159; 168; 196]. Most often, the operation was performed in patients with complications of colon cancer. A considerable proportion of stoma patients are represented by patients operated on due to complications of nontumor diseases of the colon: diverticulosis, dolichosigma, colon trauma, etc. [14; 37; 295].

All of the above explains why one of the urgent problems of modern surgery remains the rehabilitation of stomatized patients.

The main medical and social problems are associated with the presence of a colostomy, which significantly complicates the normal existence of a person in society, limits the ability to work, leads to disability and psychological discomfort. In this regard, the main condition for improving the quality of life of a stomatized patient is to restore the continuity of the digestive tract [10; 26; 36; 142; 143]. At the same time, the restoration of the continuity of the intestinal tube after the Hartmann operation is traditionally considered the most difficult.

To date, the issue of determining the optimal timing of recovery operations remains relevant. There are no clear recommendations on the scope of preoperative examination and preoperative preparation of patients. Risk factors affecting the possible outcomes of surgical intervention, methods of their prevention have not been sufficiently studied, and there is also a need to develop and search for new methods of reconstructive operations.

Complications of the early postoperative period are no less urgent problem during colon surgery. Thus, the failure of the anastomosis sutures reaches 6-25%, suppuration of the postoperative wound 26-60%, mortality associated with the development of complications is on average 5.2%. Most authors, to one degree or another, associate the development of complications with the use of various

types of intestinal sutures and anastomoses. At the same time, there is no unity of views on the choice of suture or anastomosis in various situations encountered during reconstructive operations. The widespread use of various types of tool seams has not changed the situation - no objective comparative assessment and reasonable recommendations for use have been found in the available literature [65; 70; 30; 291].

Thus, the unresolved nature of a number of issues and their inconsistency force us to look for ways to improve therapeutic and preventive measures in restoring the continuity of the colon after Hartmann surgery.

The purpose of the study. Identification of the most optimal timing for performing reconstructive and reconstructive operations in patients after Hartmann-type surgery, depending on the underlying disease; determination of operative access, type of anastomosis and possible complications, taking into account clinical and anatomical conditions.

#### Materials and methods

The work is based on the material of treatment of 92 patients who underwent reconstructive and reconstructive operations on the colon to restore its continuity. Characteristics of patients: men were 58, women - 34; age – from 23 to 74 years. All patients underwent obstructive resection of the left half of the colon with colostomy.

## The results of the study

Analysis of the results of restoring the continuity of the colon after Hartmann surgery showed an average level of postoperative complications of 25.2%, mortality of 5.6%

At the same time, in the case of the formation of anastomosis by manual suture, the complication rate was 33.3%, the mortality rate was 9.5%; in the case of hardware staple anastomosis, the number of complications was 26.0%, the mortality rate was 7.4%; when using a mechanical compression suture, postoperative complications were recorded at 13.2%, there was no mortality (0.0%).

The main reason for the development of postoperative complications in restoring the continuity of the colon after Hartmann's operation was the erroneous choice of the method of forming an interintestinal anastomosis, carried out without taking into account specific postoperative topographic-anatomical relationships.

The proposed complex of preliminary, basic and additional examinations allows to solve the issue of the possibility of performing a reconstructive operation with minimal costs, to choose the optimal surgical tactics for restoring the continuity of the colon, if necessary, to clarify the unresolved issues at the main diagnostic stage.

Analysis of the results of 10 years of experience in restoring the continuity of the colon after Hartmann surgery showed the possibility of using all types of sutures - manual thread, mechanical paperclip and mechanical compression - in the formation of anastomosis.

At the same time, the safe use of a manual suture is possible only with limited indications related to topographic and anatomical relationships after Hartmann surgery.

Hardware mechanical sutures have priority in the formation of anastomoses, and the first analysis of the widespread use of the ASK -29 crosslinking compression apparatus for colon restoration shows prevailing results compared to traditional paperclip crosslinking devices.

The use of the proposed examination complex at the diagnostic stage allows us to obtain basic information for the optimal choice of surgical tactics for restoring the continuity of the colon - indicators of topographic and anatomical ratios after Hartmann surgery.

The choice of the method of formation of the anastomosis and the type of anastomosis, taking into account these indicators, as well as compliance with other aspects of the chosen tactics of restoring the continuity of the colon, reduces the number of postoperative intraabdominal complications to 3.07% (in the comparison group 39.2%) and deaths to 4.01%, of which from progressive intraabdominal complications 1.01% (in the comparison group 10.7%).

### **Conclusion**

Thus, the restoration of intestinal continuity after a Hartmann-type operation is necessary for the purpose of labor and social rehabilitation of patients, but technically difficult surgical intervention. The question of the timing and method of restoring the continuity of the colon, as a rule, should be decided depending on the cause of the disease, the timing of the stoma. It can fluctuate both in the direction of decreasing the term and increasing it. We consider optimal terms from 2.5 to 3 months for





non-tumor diseases, from 3 to 5 months for unfavorable conditions of stoma (peritonitis). In patients with oncological diseases with tumor obstruction, these terms can range from 8-9 months to 1.5 years. When choosing a method for restoring the continuity of the colon, preference is given to the end—to-side anastomosis - terminolateral from the median, as the most reasonable access with a short rectal stump, the severity of the cicatricial-adhesive process. The second type of end-to-end anastomosis is best used with a long rectal stump, minimal adhesive process and without complications after the first operation. Only the restoration of intestinal continuity provides psychological, medical and social rehabilitation of these patients.

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