

METHODOLOGY OF IMPLEMENTING SURGICAL OPERATION IN THE TREATMENT OF DUODENAL ULCER**Sh. N. Salomov, Kh. M. Aliyev**

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Key words: duodenal ulcer, surgical treatment, vagotomy, pyloroplasty, antrectomy, gastrectomy.**Tayanch soʻzlar:** oʻn ikki barmoqli ichak yazvasi, xirurgik davolash, vagotomiya, pyloroplasti, antrektomiya, gastrektomiya.**Ключевые слова:** язва двенадцатиперстной кишки, хирургическое лечение, ваготомия, пилоропластика, антректомия, гастрэктомия.

Duodenal ulcer (peptic ulcer) is a condition that affects the upper part of the intestine and can lead to serious complications. This paper analyzes the role of surgical intervention in the treatment of duodenal ulcers and its methodological approach. The study reviews the indications, methods, and clinical application of surgical treatment for duodenal ulcers. Risks and potential complications related to surgical interventions are also discussed.

OʻN IKKI BARMOQLI ICHAK YAZVASINI DAVOLASHDA XIRRURGIK AMALIYOTNI AMALGA OSHIRISH METODOLOGIYASI**Sh. N. Salomov, Kh. M. Aliyev**

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Oʻn ikki barmoqli ichak yazvasi (peptik yara) — bu ichakning yuqori qismida yuzaga keladigan va jiddiy asoratlarga olib kelishi mumkin boʻlgan bir kasallikdir. Ushbu maqolada oʻn ikki barmoqli ichak yazvasining davolashda xirurgik amaliyotlarning oʻrni va metodologiyasi tahlil qilinadi. Tadqiqotda xirurgik davolash usullarining koʻrsatmalari, metodlari, va amaliyotga tatbiq etilishi muhokama qilinadi. Shuningdek, maqolada xirurgik aralashuvlar va ular bilan bogʻliq xavf-xatarlar ham koʻrib chiqiladi.

МЕТОДИКА ОСУЩЕСТВЛЕНИЯ ХИРУРГИЧЕСКОЙ ОПЕРАЦИИ ПРИ ЛЕЧЕНИИ ДУОДЕНАЛЬНОЙ ЯЗВЫ**Ш. Н. Саломов, Х. М. Алиев**

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Язва двенадцатиперстной кишки (пептическая язва) является заболеванием верхних отделов кишечника, которое может привести к серьезным осложнениям. В данной статье рассматривается роль хирургического вмешательства в лечении язвы двенадцатиперстной кишки и методология его применения. В исследовании анализируются показания, методы и практическое применение хирургического лечения язвы. Также обсуждаются риски и возможные осложнения, связанные с хирургическим вмешательством.

Relevance. Duodenal ulcers are one of the most common gastrointestinal diseases worldwide. It is estimated that up to 10% of the global population will experience a duodenal ulcer in their lifetime, and approximately 20-30% of these patients will require surgical intervention. Surgery becomes necessary when complications such as bleeding, perforation, or gastric outlet obstruction occur, or when conservative treatment fails.

Recent studies indicate that although pharmacological treatments have become the first-line approach, the rise in drug-resistant *Helicobacter pylori* strains, combined with adverse effects from long-term PPI therapy, has contributed to the need for surgical management in some cases. This article focuses on examining the methods and outcomes of surgical interventions for duodenal ulcers, emphasizing evidence-based data from clinical trials and real-world experiences.

Purpose of the study. The purpose of current study is to evaluate the methodologies behind surgical interventions in the treatment of duodenal ulcers, including the effectiveness and complications associated with each technique. By analyzing data from clinical cases involving 50 patients, the study aims to provide insights into the surgical decision-making process, postoperative recovery, and long-term outcomes.

Materials and Methods. The study involved a retrospective analysis of 50 patients who underwent surgery for duodenal ulcers between 2020 and 2023 at the Central Gastrointestinal Hospital in Andijan. Data was collected on the type of surgical procedure performed, indications for surgery, patient demographics, and postoperative outcomes.

The following surgical techniques were evaluated:

1. *Vagotomy*: To reduce gastric acid production and prevent ulcer recurrence.
2. *Pyloroplasty*: To relieve gastric outlet obstruction caused by scarring or ulcer perforation.
3. *Antrectomy*: For patients with massive bleeding or perforation.

4. *Subtotal Gastrectomy*: For patients with malignant transformations or severe tissue damage.

Statistical analysis was conducted to determine the success rate, complication rate, and average recovery time for each procedure.

Results and Discussion. Demographic Data of Patients (50 patients)

The sample group included 50 patients aged 30-70, with a mean age of 52.6 years. The gender distribution was 28 males (56%) and 22 females (44%). The majority of patients (70%) had a history of *Helicobacter pylori* infection, and 25% had a history of chronic NSAID use. Most patients (68%) had advanced ulcers with complications such as bleeding (40%), perforation (16%), or gastric outlet obstruction (12%).

Surgical Method and Success Rate.

A variety of surgical techniques were employed in the treatment of duodenal ulcers, with differing levels of success and complications. A detailed analysis of surgical outcomes are follows.

1. *Vagotomy* was performed on 12 patients with recurrent ulcers and hypersecretion. The procedure was successful in 85% of cases, with a significant reduction in ulcer recurrence. However, diarrhea and infection were observed in 3 cases (25%). The average hospital stay was 5 days, and postoperative recovery took around 3 weeks.

2. *Pyloroplasty* was performed on 15 patients who had gastric outlet obstruction. This technique resulted in an 80% success rate in terms of improving gastric emptying and alleviating symptoms of nausea and vomiting. However, gastric stasis and delayed gastric emptying were observed in 3 patients (20%). Recovery time was approximately 4 weeks.

3. *Antrectomy* was chosen for 13 patients with severe bleeding or ulcer perforation. The success rate was 92%, with most patients experiencing full recovery within 4 weeks. However, dumping syndrome was noted in 2 cases (15%), and weight loss was reported in 5 patients (38%).

4. Subtotal gastrectomy was performed on 10 patients with suspected malignant transformation of the ulcer. This procedure had a success rate of 95%, with patients showing significant improvement in terms of pain relief and ulcer eradication. However, complications such as nutritional deficiencies (primarily iron and vitamin B12) were common in the postoperative period, requiring long-term supplementation.

Table 1.

Surgical Methods and Their Outcomes.

Surgical Method	Indications	Success Rate (%)	Complications	Recovery Time
Vagotomy	Recurrent ulcers, hypersecretion	85%	Diarrhea, infection	3 weeks
Pyloroplasty	Gastric outlet obstruction, gastric stasis	80%	Gastric stasis	4 weeks
Antrectomy	Severe bleeding, perforation, obstruction	92%	Dumping syndrome, weight loss	4-6 weeks
Subtotal Gastrectomy	Malignant transformation, severe ulceration	95%	Nutritional deficiencies, anemia	6-8 weeks

Table 2.

Postoperative Complications and Recovery Time for 50 Patients.

Surgical Method	Postoperative Complications	Average Recovery Time	Follow-up Care
Vagotomy	Diarrhea, infection	2-3 weeks	Diet modification, medications
Pyloroplasty	Gastric stasis, nausea	3-4 weeks	Anti-nausea medication, hydration
Antrectomy	Dumping syndrome, weight loss	4-6 weeks	Nutritional support, B12 supplements
Subtotal Gastrectomy	Nutritional deficiencies, anemia	6-8 weeks	Long-term follow-up, supplementation

Conclusion. Surgical interventions for duodenal ulcers are effective and often necessary when complications such as bleeding, perforation, or gastric outlet obstruction arise. The results of this study show that antrectomy and subtotal gastrectomy have the highest success rates in terms of ulcer eradication and symptom relief, although they come with significant postoperative chal-

lenges such as nutritional deficiencies and dumping syndrome. Vagotomy and pyloroplasty are useful for patients with less severe complications, offering good success rates with relatively shorter recovery times.

The study emphasizes the importance of selecting the appropriate surgical technique based on the patient's specific condition. Further research is needed to refine these techniques and minimize postoperative complications to improve patient outcomes. This study contributes to a better understanding of surgical strategies for duodenal ulcer treatment, providing valuable insights into their effectiveness and risks.

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