ENDOVIDEOSURGICAL TECHNOLOGYIN THE DIAGNOSIS AND TREATMENT OF ACUTE ABDOMINAL PATHOLOGY

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ABSTRACT

Objective: *To analyze the results of video laparoscopic treatment of acute abdominal pathologies.* ***Materials and methods.*** *A retrospective analysis of the results of diagnosis and treatment of 470 patients hospitalized with acute abdominal pathology in the period 2009-2019 was carried out. In the Republican Scientific Center of emergency emergency care of the Samarkand branch. The patients were divided into the main and control groups.* ***Results.*** *This method made it possible to improve the accuracy of diagnosis by 2 times, significantly reduce the number of unnecessary laparotomies for all nosologies (by an average of 66 ± 4.13%) and the traumatic nature of surgical interventions. The analysis of the results of treatment according to the main nosological forms allowed us to confirm the advantages of introducing endovideosurgical technologies into the routine diagnostic and therapeutic process.* ***Conclusions.*** *Thus, laparoscopy allows you to reduce the percentage of unnecessary laparotomies, shorten the time of diagnosis, and reduce the occurrence of postoperative complications.*

KEYWORDS: *Video Laparoscopy, Acute Abdominal Pathology, Diagnosis and Treatment.*

INTRODUCTION

Acute abdominal pathology ranks first among all surgical diseases, significantly surpassing the frequency of surgical pathology of the heart, blood vessels, lungs, etc **[1, 2]**.

Emergency abdominal pathology has been and continues to be a complex problem of modern medicine for many years. Acute abdominal pathology, surgical care in which for the most part is the prerogative of city and district hospitals, continues to attract the close attention of surgeons. It is quite natural that timely and reliable diagnosis of this pathology determines the choice of appropriate treatment tactics **[3, 4, 5]**.

The purpose of the research: To analyze the results of laparoscopic treatment of acute abdominal pathologies.

Materials and methods of the research

A retrospective analysis of the results of diagnosis and treatment of 470 patients hospitalized with acute abdominal pathology in the period 2009-2019 was carried out in Samarkand branch of the Republican scientific center of emergency medical care. The patients were divided into the main and control groups.

The main group consisted of patients who underwent diagnostic or therapeutic laparoscopy - 288 (61.3%), and the control group included 182 (38.7%) patients who underwent traditional therapy. In addition, a retrospective assessment of the results of diagnosis and treatment of more than 340 patients since 2009 was performed; patients were also divided into 2 groups (the main group - 113, the control group - 227) according to the criteria for the use of endovideosurgical technology. Among them, there were 224 men and 246 women aged 18 to 78 years, the average age was 41 ± 10 years. The initial differences between groups of patients with different variants of the course of the disease and the results of conservative and surgical treatment using both traditional and endovideosurgical technologies were retrospectively investigated. The distribution of patients by nosological forms is presented in table 1.

TABLE 1 DISTRIBUTION BY NOSOLOGICAL FORMS OF PATIENTS WITH ACUTE ABDOMINAL PATHOLOGY

Nosological form	**Total**	
	n	**%**
Acute appendicitis	73	15,5
Acute pancreatitis	126	26,8
Acute cholecystitis	125	26,6
Acute intestinal obstruction	30	6,5
Gastrointestinal bleeding	35	7,4
Perforated ulcer	34	7,2
Strangulated hernia	47	10
Total	**470**	

An average of 398±11 people were treated each year. 70% of patients had concomitant diseases, in some cases they were the reason for refusing endovideosurgical interventions. The

effectiveness of treatment with the use of diagnostic and therapeutic endovideosurgical technology is analyzed. The program of examination of patients consisted of examination before and after surgery, in the near term after surgery (2-4 months) and in the long term after surgery (1-6 years). In general, the diagnostic and treatment protocols met the requirements of regulatory documents. The condition of patients before and after surgery was assessed on the SOFA, APACHE II scale **[6, 7]**.

Research results and discussion

Since the beginning of statistical accounting of the main nosological forms of acute abdominal pathology, acute appendicitis has occupied the first place both in terms of the absolute number of patients and in terms of specific gravity. The second place is occupied by acute pancreatitis and the third by patients with acute cholecystitis.When assessing the dependence of postoperative complications on the length of stay of patients in the hospital, a pattern characteristic of almost all nosological forms was revealed: with an increase in the time elapsed from the onset of the disease to the admission of the patient to the hospital, the level of postoperative complications sharply increases.

TABLE 2 POSTOPERATIVE COMPLICATIONS IN ABDOMINAL PATHOLOGIES DEPENDING ON THE TIME OF HOSPITALIZATION OF PATIENTS

Nosological form of abdominal pathology	Post operative complications during hospitalization, %		
	up to 6 hours	6-24 hours	later than 24 hours
Acute appendicitis	0,06	0,1	0,5*
Strangulated hernia	2,8	4,7*	15,2*
Acute intestinal obstruction	5,8	8,0	14,8*
Acute cholecystitis	2,7	2,9	6,7*
Acute pancreatitis	18,8	26,9	33,6*
Perforated stomach and duodenal ulcer	2,2	5,2*	21,6*
Gastrointestinal bleeding	15,5	7,9	17,5

Note: * $p < 0,05$.

The change in the treatment tactics of a number of nosological forms and the introduction of modern technologies, such as diagnostic and therapeutic endovideosurgery with the growth of negative trends allowed to restrain the expected increase in complications. This applies to both acute appendicitis and cholecystitis, as well as bleeding ulcers and pancreatitis.

This method made it possible to improve the accuracy of diagnosis by 2 times, significantly reduce the number of unnecessary laparotomies for all nosologies (by an average of 66 ± 4.13%) and the traumatic nature of surgical interventions.

The study of the results of treatment according to the main nosological forms allowed us to confirm the advantages of introducing endovideosurgical technologies into the routine diagnostic and therapeutic process.

The introduction of diagnostic and therapeutic endoscopic technologies in the emergency service made it possible to practically eliminate unnecessary appendectomies. The results of surgical interventions for acute appendicitis were studied in 73 patients - 39 (53.4%) men and 34 (46.6%) women. Endovideosurgical technique was used for diagnostic and therapeutic purposes in 52 (71.2%) patients, including 50 patients with the main preoperative clinical diagnosis of acute appendicitis and 2 patients in whom acute appendicitis was a laparoscopic finding. Based on laparoscopic manipulations, open methods of surgery were performed in 9 (17.3%) cases, and video laparoscopic appendectomy was performed in 43 (82.7%) patients. 21 (28.8%) patients underwent traditional appendectomy without preliminary laparoscopy.

None of the laparoscopic conclusions about the absence of acute appendicitis in the laparoscopy group was subsequently refuted. The sensitivity of endovideosurgical technologies in relation to acute appendicitis was 99%, specificity - 91% and accuracy - 96%.

In complicated peptic ulcer of the stomach and duodenum, video laparoscopy made it possible to reduce diagnostic errors by 35%, virtually eliminate the concept of dynamic observation in perforated gastric and duodenal ulcers, and reduce the operational risk in somatically burdened patients. In case of gastric bleeding, diagnostic and therapeutic video endoscopy was the method of choice, which allows achieving a positive clinical result in 70% of cases and reducing complications from 15 to 5%.At the moment, endovideosurgical technology for acute cholecystitis has become the "gold standard" of diagnosis and treatment, has allowed the use of early surgical intervention tactics and to reduce postoperative complications by up to 3%. In acute appendicitis, this method made it possible to exclude unnecessary appendectomies in 21% of cases, to establish diagnoses occurring under the mask of acute appendicitis, and in 90% of cases to perform emergency surgery.

CONCLUSIONS

Thus, in compliance with the generally accepted principles of choosing a diagnostic and therapeutic approach based on the widespread use of emergency therapeutic and diagnostic endovideosurgical technology, the results of treatment of patients with abdominal pathology are significantly improved. This makes it possible to reduce the invasiveness of diagnosis and the severity of surgical intervention, especially in conditions of high operational risk, to ensure early diagnosis of the disease, to exclude unnecessary laparotomies, to choose an adequate therapeutic tactic.

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