

## PRINCIPLES FOR COMPARING ENDOSCOPIC AND CONVENTIONAL SURGICAL INTERVENTIONS IN THE BILIARY TRACT

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### ABSTRACT

Recently, many different techniques have appeared for the treatment of choledocholithiasis and stenosing duodenal papillitis. The most widespread are endoscopic transpapillary interventions preceding laparoscopic cholecystectomy, which are currently the "gold standard" in the treatment of gallstone disease complicated by choledocholithiasis, stenosing duodenal papillitis and their combination. However, the technical possibility of performing endoscopic interventions is not always available. Difficulties arise in 10-20% of patients with large, "uncomfortable" shapes, or localized concretions, altered anatomy of the Vater's nipple area, with Mirizzi syndrome, gastric resection according to Billrot-2 in the anamnesis and for a number of other reasons. At the same time, in 5.4-15% of them, endoscopic transpapillary interventions are complicated by bleeding, acute pancreatitis, damage to the common bile duct and duodenum, detachment, insertion of a litextractor and a number of other complications, which in some cases lead to death.

**Kalit so'zlar:** tana massasi indeksi, stenzli o'n ikki barmoqli ichak papilliti, xoledoxolitotomiya.

### INTRODUCTION

Success in the treatment of patients with various complicated forms of cholelithiasis is also largely associated with determining the optimal treatment time, the nature of therapeutic measures and the tactical approach [5,6]. However, currently this task remains unresolved, as evidenced by the huge variety of approaches used using combinations of conservative and surgical treatment methods.

Medicinal litholytic therapy was introduced into practice in the early 1970s. Despite all its apparent attractiveness, this method has practically not found application in clinical practice, since drug-induced litholytic therapy is effective only for small, cholesterol-containing concretions [7,11]. Even with strict selection of patients for litholytic therapy, it is possible to dissolve concretions or at least reduce their size only in 35-70% of patients, which does not

exclude the need for surgical intervention [6,7]. Also, after taking medications, there is a high percentage of recurrence of cholecystocholedocholithiasis and side effects such as diarrhea, biliary colic, increased liver enzymes in blood serum, allergic reactions are often observed, therefore, this method is more often used only in combination with other treatment methods [7].

Contact chemical litholysis requires the presence of an external biliary fistula, which is necessary for the introduction of chemicals directly into the bile ducts. It is also important to note the high toxicity of the injected substances and the low effectiveness of the procedure, which, as with drug-induced litholytic therapy, depends on the chemical composition of the stones [6,9].

Percutaneous extraction of concretions has been known since the beginning of the twentieth century. This method of treatment of patients with choledocholithiasis is an alternative in case of unsuccessful attempts of endoscopic interventions in patients with severe somatic pathology and a high degree of anesthesiological and surgical risk. This method requires the presence of a functioning pathological or artificial external biliary fistula, through which concretions are extracted.

Currently, modern medical equipment and highly qualified specialists ensure the success of percutaneous transhepatic puncture and drainage of dilated bile ducts in 97,100% of cases. Biliary decompression is also performed as a temporary treatment procedure before radical intervention, and as an option for final palliative treatment in patients with high operational risk [3].

This technique makes it possible to completely eliminate the development of complications that are characteristic of endoscopic transpapillary interventions. This technique also has a number of positive qualities: low traumatism, high diagnostic value and effectiveness, absence of complications characteristic of general anesthesia [3,6].

Difficulties often arise when trying to extract concretions that do not correspond to the diameter of the fistula, especially if pre-extraction is required for lithoextraction [6]. Some surgeons perform this manipulation under the control of a choledochoscope to extract concretions. The effectiveness of this method can reach 98.3%, and the percentage of complications of this manipulation is 4.2% [4,6].

Extracorporeal shock wave lithotripsy is a low-traumatic intervention that entered clinical practice in 1985. With the advent of this technique, the prospect of non-surgical treatment of gallstone disease and choledocholithiasis has appeared. However, the first observations showed that not every patient suffering from GI can be recommended this procedure, and a positive result is not achievable in all cases. The effectiveness of extracorporeal shock wave lithotripsy largely depends on the properties of the stones themselves. In uncalcified single concretions, the positive effect of the procedure is observed in 83-93% of cases [11,13]. Often, after extracorporeal shock wave lithotripsy, subsequent additional endoscopic extraction of stone fragments is required, and the effectiveness of treatment decreases proportionally with an increase in the size of the concretions. After extracorporeal shock wave lithotripsy, recurrence of cholelithiasis is noted in more than a third of patients [5,7].

### **The Purpose of the Study**

The main purpose of this study is to improve the results of treatment of patients with choledocholithiasis, stenosing duodenal papillitis and their combination by introducing and improving methods of laparoscopic interventions on extrahepatic bile ducts.

### **Research Materials and Methods**

Research was carried out in the surgical departments of the Andijan branch of the scientific center of Emergency Medicine of the Republic, in the Department of Neurosurgery of the adti clinic, in the private clinic of Carona MEDLAIN.

The study is based on an analysis of the results of the treatment of 115 patients with choledocholithiasis, stenosis duodenal papillitis from 864 patients who underwent cholecystectomy from January 2020 to December 2023. All patients are divided into two groups.

The control group included 60 patients treated with choledocholithiasis, stenosis duodenal papillitis from January 2020 to December 2023. In the surgical treatment of tumor disease during this period, as a rule, without prior laparoscopy, mainly open cholecystectomy is used. The main group included 55 patients who underwent surgery from January 2020 to June 2023. In this group, a two - stage treatment of choledocholithiasis is mainly used-endoscopic transpapillary lithextraction, followed by laparoscopic cholecystectomy. Laparotomy is performed choledocholithomia if it is not possible to eliminate choledocholithiasis using endoscopic transpapillary interventions. Laparoscopic methods of treating cholelithiasis patients with choledocholithiasis and duodenal papillitis with stenosis are actively being introduced and improved to practice.

### **RESEARCH RESULTS**

A visual analog pain scale was used to assess the severity of pain in the early postoperative period; a comparison of the severity of postoperative pain was assessed using the Student t-test. Patients with laparoscopic surgery had significantly lower postoperative pain rates than the comparison group (table 15). The postoperative pain rate, assessed using the visual analog Pain Scale 6 hours after surgery in the main group, varied from 2 to 5 points and was  $2.41 \pm 0.78$ ; the control group had a violent range of postoperative pain syndrome. 5 to 9 points, average -  $6.98 \pm 2.02$  points, postoperative pain level after 12 hours is  $2.02 \pm 0.67$  (2 to 4 points) in the main group,  $5.85 \pm 1.72$  points (4 to 8 points) in the control group, 24 hours later -  $1.71 \pm 0.53$  (1 to 3) points in the main group and  $4.15 \pm 1.02$  (4 to 7) points, respectively. In the first 48 hours, the severity of pain in patients in the main group ranged from 1 to 3 points and averaged  $1.52 \pm 0.44$  points; the severity of pain in the control group is within the first 48 hours after the end of treatment. the operation varied from 3 to 6 points, averaging  $3.75 \pm 0.98$  points. On Day 3, the pain syndrome in the main group of patients is  $1.13 \pm 0.34$  (0 to 3 points), with pain complaints predominating in the area of postoperative wounds that do not require the use of drugs. analgesics, and in the control group -  $2.25 \pm 0.69$  points (2 to 5 points), which in some cases required a prescription of painkillers.

In the main group, prescribing painkillers was required only by 8 patients, in the control group - by 54 patients, in the main group patients, the duration of the need to prescribe painkillers

was from 0 to 2 days. on average, up to  $1.37 \pm 0.32$  days, the range of painkiller drug needs in control group patients was 1 to 4 days, with an average of  $3.36 \pm 0.91$  days (table 16).

Most of the patients in the control group complained of postoperative injuries and pain in the drainage area for the first  $4.17 \pm 1.44$  days (3 to 6 days), which are exacerbated by light physical activity, which is necessary. prescribing non-drug pain relievers. At the same time, patients in the main group did not need to prescribe non-drug analgesics after the first  $1.98 \pm 0.53$  (1 to 4 days) of the postoperative period ( $p < 0.05$ ).

On the first day after the operation, the required dose of a narcotic analgesic expressed in the amount of morphine milligrams was on average  $0.75 \pm 0.23$  mg (0 to 2 mg) in the main group, in the control group -  $8.11 \pm 2.61$  mg (3 to 10 mg). On Day 2, the required dose of morphine narcotic analgesic was  $0.24 \pm 0.07$  mg (0 to 1 mg) in the main group and  $5.24 \pm 1.27$  mg (3 to 7 mg) in the control group. On Day 3, the need to prescribe analgesic drugs in the main group of patients became completely unnecessary, while the required dose of morphine drug analgesics in control group patients was  $3.16 \pm 1.03$  mg in the 0 to 5 range.

### CONCLUSION

In 19-37.7%, open laparotomy intervention in the extrahepatic bile ducts is accompanied by the development of complications in the early and late postoperative periods, and postoperative mortality is 7.8%, limiting their use and encouraging the search for new ways to solve the problem.

Laparoscopic interventions in extrahepatic bile ducts are of great interest as an alternative to intervention from laparotomy. However, many surgeons fear the use of endovideoscopic technologies in the treatment of patients with choledocholithiasis and stenosis duodenal papillitis. One of the barriers limiting the spread of endovideoscopic technologies in the treatment of patients with choledocholithiasis, stenosis duodenal papillitis and their combination is the widespread opinion among surgeons that interventions through laparoscopic access increase the duration of surgery, the number and character of intraoperative complications. complications in the early postoperative period are also accompanied by a large number of conversions to enter laparotomy.

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