

COMPARATIVE ASSESSMENT OF ENDOSCOPIC AND CONVENTIONAL SURGICAL INTERVENTIONS IN THE BILIARY TRACT

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Abstract:

Currently, cholelithiasis occupies a leading position in the structure of diseases of the organs of the hepatobiliary system. It has not only great medical, but also social significance, since the number of patients of young and working age is steadily increasing from year to year. In recent years, there has been a tendency to increase the incidence of cholelithiasis all over the world, including in Russia. Simultaneously with the increase in the incidence of ChT, the number of its complicated forms is also increasing: choledocholithiasis in combination with stenosing duodenal papillitis (SDP) and mechanical jaundice. Thus, the problem of treating gallstone disease and its ductal complications is one of the most urgent for modern biliary tract surgery.

Keywords: papillosphincterotomy using antegrad, antegrad papillosphincterotomy, large duodenal nipple, cholelithiasis.

Introduction

Cholelithiasis has been known since ancient times, its first descriptions can be found in the writings of Hippocrates, Avicenna, Celsus. People of any age suffer from housing and communal services, but most often they are middle-aged, elderly and senile people. According to numerous observations, during the 20th century, especially in the second half, there was a steady increase in the prevalence of cholelithiasis [7,12]. Today, housing and communal services are found in more than 10% of the world's population. According to a number of authors, the prevalence of GI in certain regions of the globe

can reach 10-40%, and in recent decades the number of GI patients has doubled [2,4,9]. Thus, in Europe and North America, cholelithiasis is detected in 10-15% of the population under the age of 40, 15-20% over the age of 40, and almost 50% after the age of 70 [1,3].

With an increase in life expectancy, the number of elderly and senile patients with no less dangerous concomitant diseases in addition to GI is also increasing. Thus, in 73-76% of such patients, the course of GI is complicated by various severe concomitant diseases that sharply worsen the results of treatment [6,7].

Simultaneously with the increase in the general incidence of cholelithiasis, the number of its complicated forms is also increasing. Among all the complications of GI, special attention should be paid to choledocholithiasis, stenosing duodenal papillitis and their combination.

Choledocholithiasis complicates the course of the disease in 10-35% of patients suffering from GI [5,7]. In patients over 60 years of age, the incidence of choledocholithiasis reaches 35-68% [6,7]. An equally important place among the complications of GI is occupied by stenosing duodenal papillitis caused by fibrosis of the large duodenal nipple, due to damage to the sphincter of Oddi by bile concretions migrating along the choledochus [6,9].

Choledocholithiasis often leads to the development of such life-threatening complications as: mechanical jaundice, acute biliary pancreatitis, acute purulent cholangitis [88,202], stricture of the terminal choledochus [58,106], biliary cirrhosis of the liver [3,4,6].

In 68-92% of cases, choledocholithiasis is accompanied by mechanical jaundice. Stenosing duodenal papillitis accounts for up to 37% of cases of subhepatic cholestasis. In 38.1 -75% of all cases of benign mechanical jaundice, stenosing duodenal papillitis is accompanied by choledocholithiasis. In 4.3-9% of cases, papillostenosis is the direct cause of the development of mechanical jaundice [2,3,5,6].

Mechanical jaundice, which most often complicates the course of choledocholithiasis, significantly aggravates the course of the disease. Today, there is a tendency to increase the mortality rate in choledocholithiasis complicated by mechanical jaundice, not only among elderly patients, but also among people of working age [6,7].

Postoperative mortality among patients over 60 years of age, operated without previous decompression of the biliary tract, reaches 36-41%. When the course of the disease is complicated by acute purulent cholangitis and cholangiogenic liver abscesses, postoperative mortality increases to 62% [5,8,9].

Thus, the importance of the problem of treating patients with cholelithiasis complicated by choledocholithiasis, cholangitis and obstructive jaundice is constantly increasing. This is due to both an increase in the number of able-bodied, elderly and senile patients, as well as the development of complicated forms of the disease and severe complications with high postoperative mortality. This circumstance encourages the medical community to search for new and improve existing methods of resolving

choledocholithiasis, which have appeared quite a lot in recent decades [3,6,8,9]. Today, tactical approaches to the treatment of complicated forms of GI have also changed, there has been a reassessment of the possibilities of old and the emergence of new methods of treating gallstone disease and its complications [6,7].

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.

The results of the study. Mild pain syndrome in the main group helped patients to activate early, including reduced respiratory failure and intestinal paresis. This condition had a positive effect on the duration of inpatient treatment of laparoscopic operated patients and ranged from 6 to 10 days, reducing the hospital stay of patients after surgery to an average of 7.1 ± 1.58 ($p_{0,05}$).) 96 ± 1.12 ($p_{0,05}$) days (8 to 14 days) compared to 10 days in patients with open surgery

Thus, according to the Clavien-Dindo classification, mild postoperative complications lost after spontaneous or short-term conservative therapy were observed in 21 (38.18%) patients in the main group and 29 (48.33%) patients. control group. Thus, vomiting and hyperthermia, as the most common postoperative complications in both comparison

groups, have been observed in 18 cases in the main group and 24 cases in the control group.

In 1 patient in the main group, an external biliary leak is developed. The life of the fistula was 8 days. In the control group, 2 patients observed the formation and functioning of external biliary leakage, but the leaks worked much longer - for 13 and 14 days. All leaks closed on their own and did not require surgical treatment.

Wound infection in the main group was detected in only 2 patients and did not require serious treatment. In the control group, 5 patients were diagnosed with wound infection, three of whom required systemic antibacterial therapy to treat wound infection.

Nosocomial pneumonia, which complicated the early postoperative period, was observed in 1 primary and 2 control group patients, requiring parenteral antibacterial therapy. Thus, according to the Clavien-Dindo classification, mild postoperative complications lost after spontaneous or short-term conservative therapy were observed in 21 (38.18%) patients in the main group and 29 (48.33%) patients. control group. Thus, vomiting and hyperthermia, as the most common postoperative complications in both comparison groups, have been observed in 18 cases in the main group and 24 cases in the control group.

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Nosocomial pneumonia, which complicated the early postoperative period, was observed in 1 primary and 2 control group patients, requiring parenteral antibacterial therapy. To date, there are no generally accepted indications and contraindications for laparoscopic interventions in the extrahepatic bile ducts. Some surgeons consider laparoscopic intervention safe and effective, while others oppose such interventions, arguing their positions due to a high percentage of postoperative complications and iatrogenic damage to the extra-hepatic bile ducts. Thus, a reasonable assessment of indications and contraindications, the possibility and expediency of laparoscopic interventions on the extrahepatic bile ducts play an important role.

According to the results of this study, it is possible to formulate and identify indications and contraindications for performing laparoscopic intervention in patients with choledocholithiasis, stenosis duodenal papillitis and a combination of them.

Laparoscopic interventions on the nipple of the extra-hepatic bile ducts and large duodenum require the surgeon to have certain skills in the field of endoscopic surgery due to the nature of operations related to working in a limited area. Any deviations, adhesions, scars and inflammatory processes from the typical anatomical structure of the hepatoduodenal zone can seriously complicate the work of the surgeon and lead to

damage to anatomically important structures, conversion and the development of serious postoperative complications, including death. Laparoscopic treatment of choledocholithiasis, the so-called "difficult", can be difficult, especially for a surgeon who does not have enough experience in laparoscopic surgery, which often leads to conversion.

This study has proven that the endovideoscopic treatment of cholecystocholedocholithiasis, stenosis duodenal papillitis, and their combination, following the recommended algorithm and surgical techniques, is a safe and effective method of treating choledocholithiasis, which in no case is inferior to choledochotomy performed by laparotomy. Laparoscopic interventions by patients are much easier to tolerate and the number of postoperative complications is not significantly greater than in traditional laparotomy.

Conclusion

Today, gallstone disease occupies a leading place in the structure of diseases of the hepatobiliary system. It is of great medical-social importance, and the number of patients of young and working age is increasing from year to year. In parallel with the increase in the incidence of cholelithiasis, the number of patients with choledocholithiasis in various combinations with stenosis of the duodenum and obstructive jaundice is also growing, which is 10-35% of all patients with cholelithiasis. The number of patients in old and old age is also growing, their disease is complicated by severe pathology. Many different methods have been developed to treat choledocholithiasis. They all have certain indications and contraindications, their supporters and opponents, and do not always apply to a particular patient. For example, endoscopic transpapillary interventions, which are the "gold standard" in the treatment of choledocholithiasis, are not performed in 10-20% of patients, and 5.4-15% of them develop postoperative complications, which in some cases lead to death.

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