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# WAYS TO IMPROVE DIAPEUTICA METHODS AND X-RAY SURGERY IN THE TREATMENT OF COMPLICATED FORMS OF CHOLESTILIS DISEASE

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#### Annotation

As evidenced by the National Institutes of Health (2017), cholelithiasis occurs in 10-15% of the adult population, and the frequency of purulent complications of inflammatory diseases of the biliary tract occurs in 46% of cases and, despite the close attention of researchers to this problem, remains highly relevant. The inflammatory process in this localization is characterized not only by a local purulent-destructive process, but also by systemic disorders that contribute to the rapid development of severe endogenous intoxication and severe organ dysfunction. Thanks to the introduction into clinical practice of new modern diagnostic methods (ultrasound, CT, MRI, RPCG) and minimally invasive treatment methods, it was possible to significantly improve the results of treatment of cholelithiasis and its complications, such as acute destructive cholecystitis, choledocholithiasis and purulent cholangitis.

#### **Keywords**

Liver, cholecystitis, cholangitis, gallstones, ultrasound.

**Relevance.** Acute cholecystitis and obstructive cholangitis are one of the most severe and life-threatening complications of biliary tract diseases, which is an acute inflammation of the bile ducts that occurs against the background of a persistent violation of the outflow of bile. The leading cause of impaired bile outflow is the development of cholelithiasis, and as retrospective studies show, today every tenth person has cholelithiasis of varying severity, and choledocholithiasis as a complication occurs in 20-30% of cases (Hungness E., 2016).

A feature of this pathology is the development of obstructive jaundice, and statistically in this age group it occurs 35% more often than at a younger age. And it is the development of biliary hypertension, due to mechanical disturbances in the outflow of bile, that explains the formation of cholangitis.



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The urgency of the problem has increased due to the increase in the number of patients with complicated forms of cholelithiasis and atypical forms of choledocholithiasis, and the increase in surgical activity, especially in elderly and senile patients.

Complicated forms of cholelithiasis in patients of older age groups, especially the elderly, are characterized by a nonspecific clinical picture, high variability and often blurred clinical manifestations, and this is the reason for frequent errors in diagnosis and choice of surgical tactics; today, in more than 20% of cases, a similar one occurs painting. As you know, diagnosing bile duct pathology has its own difficulties, because With this pathology, the clinical picture of damage to the gallbladder is very poor. It should also be noted that stones in the bile ducts very often do not manifest themselves, which is why they are called "silent" stones. All this together is the reason for late hospitalization of patients, so in the first 12 hours only 10-12% of the total number of patients seek qualified medical care, after 24 hours or more about 50% of patients, the rest of the patients are hospitalized in the first three days from the moment of the onset of an acute attack. It is these reasons that lead to an increase in the number of complications, thereby worsening the effectiveness of treatment.

**Purpose of the study:** Improving the results of treatment of patients with complicated forms of cholelithiasis by developing and implementing tactics of interventions on the biliary tract using diapeutic and X-ray endoscopic methods.

Materials and methods of research. In the surgical departments of the clinic of Samarkand State Medical University over the past 8 years in the period 2015-2022. 1636 patients with cholelithiasis were operated on, of which 301 (18.4%) had complicated forms of cholelithiasis, i.e. approximately every fifth.

Based on the purpose of our study, we studied the results of examination and treatment of 301 patients with complicated forms of cholelithiasis.

In accordance with the purpose and objectives of the study, patients were divided into the following study groups:

- 1. The comparison group consisted of 137 patients who, in the period 2015-2018. operated on for acute cholecystitis and damage to the bile ducts for emergency and urgent indications;
- 2. The main study group consisted of 164 patients. The diagnostic and treatment algorithm we proposed was built taking into account the priority use of surgical treatment methods using minimally invasive surgical interventions. The clinical implementation of the program was based on the recommendations of the European Association of Surgery Society ERAS (Enhanced Recovery After



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Surgery). In the study, both groups of patients were identical both in age and in the severity of clinical manifestations and severity of the disease.

According to the classification adopted by the WHO Regional Office for Europe (2016), elderly (60-74 years) and elderly patients (75 years and older) were 68 (22.6%) and 13 (4.3%), respectively. The bulk were patients of younger middle age 65 (21.7%) and older middle age 138 (46.2%). 19 (6.6%) were young patients.

The majority of patients were female - 189 (62.8%), male - 112 (37.2%) (Table 2.1). The ratio of women to men is 1.8:1.

Analyzing the anamnesis data, it was revealed that in 44.9% of cases (135 patients), the average duration of the disease was more than 2 years. It should be noted that in 24.0% of cases (72 patients), the initial signs of the disease appeared on average 5 years ago. 39 patients (13%) were admitted to the surgical department of the clinic with a first attack in the history of the disease, however, as the data showed, in every second patient this gallbladder pathology did not occur spontaneously, but against the background of long-term ongoing chronic inflammation. More than 37.0% (111 patients) of the total number of patients underwent repeated hospital treatment for certain diseases of the gallbladder or bile ducts.

Analysis of the results showed that in the majority of patients in older age groups, the diagnosed picture of acute cholecystitis developed against the background of a chronic process in the gallbladder, and this led to the formation of foci of inflammation in the gallbladder and bile ducts during hospitalization. Consequently, we come to the following conclusion that the chronicity of inflammatory processes in the gallbladder leads to the development of serious complications of acute cholecystitis in the form of pathological transformations in the common bile and intrahepatic bile ducts, sclerosis with subsequent deformation of the major duodenal papilla.

An analysis of the time of admission of patients to the surgical department showed that from the moment the first signs of acute cholecystitis appeared on the first day, only 78 patients (25.8%) were hospitalized; the bulk of patients were admitted by the end of the second or third day, from this group of patients 59 patients were admitted later, after 3-4 days.

Results and discussion of the work: of all 137 patients in the control group, 98 (71.5%) had a prevailing clinical picture of acute destructive cholecystitis, and 39 (28.5%) had a clinical picture of obstructive jaundice and cholangitis due to choledocholithiasis and stenosis of the abdominal joint.



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We proceeded from the principle that effective treatment of acute destructive cholecystitis and obstructive cholangitis involves adherence to the principle of active surgical tactics, as a result of which, in the case of complicated forms of cholelithiasis in the group of elderly and senile patients, surgical intervention is indicated, which must be performed in the first 24-48 hours from the moment of hospitalization.

Operations for emergency indications (within the next 6 hours from admission to the hospital) were performed in 65 (47.4%) patients, of which 53 were due to acute destructive cholecystitis. Also, in 12 patients, emergency operations were performed in the presence of a clinical picture of acute obstruction of the common bile duct with increasing obstructive jaundice and cholangitis.

For urgent indications (within the next 24-72 hours), 72 (52.5%) patients were operated on in the absence of peritoneal symptoms and a pronounced progressive clinical picture of obstructive cholangitis.

In all 137 operated patients of the comparison group, surgical intervention consisted of performing cholecystectomy (in 98 patients), or cholecystectomy with choledocholithotomy (in 39 patients) with external drainage of the common bile duct, and surgical intervention was performed from a wide laparotomy approach in 56, from a minilaparotomy access - 81.

Analysis of the incidence of mortality and postoperative complications depending on the urgency of operations in gr. comparison showed that these indicators are the worst after emergency operations: - mortality 4.6%, abdominal biliary and septic complications 12.3%, extra-abdominal complications of comorbid pathology 13.8%. When operations were performed for urgent indications, the mortality rate was 1.4%, the rate of biliary and septic complications was 6.9%, and extra-abdominal complications were 9.7%.

**Conclusion.** Prognostically unfavorable factors in the treatment of patients with complicated forms of cholelithiasis are the performance of emergency simultaneous radical operations in patients with acute destructive cholecystitis and purulent cholangitis with severe intoxication according to the Tokyo classification TG 18.

Sonodiapeatic methods of decompression of the gallbladder are an effective emergency method of treating complications of acute cholecystitis, allowing to stop purulent intoxication and at the subsequent stage of treatment to perform cholecystectomy laparoscopically in 29.6% and from a mini-access in 53.7%.

It is advisable to carry out X-ray endoscopic interventions in the scope of EPST with mandatory nasobiliary drainage in cases of purulent cholangitis and



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hyperbilirubinemia over 100  $\mu$ mol/l, and EPST was the final method of treatment in 16.1% of patients.

The priority use of minimally invasive decompression interventions in the staged treatment of patients with complicated forms of cholelithiasis contributed to early relief of the infectious process, prevention of the development of biliary and abdominal sepsis and reduced mortality from 5.1% to 2.4%, biliary and septic complications from 17.5% to 7.3%.

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