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SURGICAL TACTICS IN COMPLICATED FORMS OF ACUTE CHOLECYSTITIS

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Abstract. The article presents a review of modern approaches to the selection of surgical tactics in complicated forms of acute cholecystitis. The main clinical factors influencing the choice of surgical intervention are analyzed, including the severity of inflammation, anatomical features, comorbid conditions, and the timing from disease onset. Indications for laparoscopic, open, and subtotal cholecystectomy, as well as for the use of percutaneous cholecystostomy, are discussed. The importance of an individualized approach is emphasized, which allows a reduction in postoperative complications and improvement of treatment outcomes in patients with complicated acute cholecystitis.

Keywords: acute cholecystitis, complicated forms, surgical tactics, laparoscopic cholecystectomy, subtotal cholecystectomy, cholecystostomy.

Introduction. Acute cholecystitis occupies one of the leading positions among emergency diseases of the abdominal organs and accounts for up to 15–20% of all emergency abdominal surgical pathology. The increasing incidence is directly related to the growing prevalence of gallstone disease,

population aging, and a high frequency of metabolic disorders. According to the World Health Organization, more than 2 million hospitalizations for acute cholecystitis are registered annually, with complicated forms detected in 15–35% of patients. Despite significant progress in diagnostics and the development of laparoscopic surgery, complicated forms of acute cholecystitis—such as empyema, phlegmon, gangrene, gallbladder perforation, cholangitis, and peritonitis—remain associated with a high rate of postoperative complications (20–40%) and mortality reaching 10–15% in destructive variants. This determines the need for a differentiated approach to surgical tactics, taking into account the clinical form of the disease and the patient's general condition.

Complicated Forms of Acute Cholecystitis. Complicated forms include disease variants in which the inflammatory process extends beyond the gallbladder wall and is accompanied by destructive changes or generalized infection. The most common complications are:

- phlegmonous and gangrenous cholecystitis;
- gallbladder empyema;
- gallbladder perforation with localized or diffuse peritonitis;
- choledocholithiasis and acute cholangitis;
- paravesical infiltrates and abscesses;
- Mirizzi syndrome.

The presence of complications requires revision of standard treatment algorithms and an individualized choice of the extent and method of surgical intervention.

Factors Determining the Choice of Surgical Tactics. The key factors influencing surgical decision-making include:

- severity of inflammation and presence of gallbladder destruction;
- timing from disease onset (the first 72 hours are considered optimal for laparoscopic intervention);

- general condition of the patient and comorbidities, especially in elderly patients;
- anatomical conditions of the hepatobiliary region and the possibility of safe visualization of Calot's triangle;
- presence of choledocholithiasis, requiring staged or simultaneous combined treatment.

Main Surgical Treatment Methods.

Laparoscopic cholecystectomy remains the “gold standard” for the treatment of acute cholecystitis. In complicated cases, its performance is possible with sufficient surgeon experience and adequate anatomical visualization.

Open cholecystectomy is indicated in diffuse peritonitis, pronounced inflammatory infiltration, and when safe laparoscopic access is not feasible.

Subtotal cholecystectomy is considered a safe alternative in cases with a high risk of bile duct injury.

Percutaneous cholecystostomy is used in patients with extremely high operative and anesthetic risk and may serve as a stabilization stage before definitive surgery.

Results and Prognosis. The outcome of treatment for complicated acute cholecystitis directly depends on the timeliness of surgical intervention and the appropriateness of the chosen tactic. The most unfavorable prognosis is observed in elderly patients with delayed hospitalization, purulent-destructive forms of the disease, and severe comorbid pathology. The application of a differentiated approach allows a reduction in complication rates and mortality, shortening of hospital stay, and improvement of long-term outcomes.

Conclusion. Complicated forms of acute cholecystitis require an individualized approach to the choice of surgical tactics. There is no universal strategy—each clinical case must be evaluated considering the disease form,

stage of inflammation, anatomical conditions, and the patient's general status. A rational combination of minimally invasive and open techniques, the use of flexible treatment algorithms, and timely interventional support are key factors in improving the safety and effectiveness of treatment.

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