

CLINICAL CHARACTERISTICS OF PATIENTS WITH ACUTE CALCULAR CHOLECYSTITIS

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Relevance. The study demonstrated that a comprehensive assessment of the most significant preoperative and intraoperative risk criteria allows for quantitative prediction of the likelihood of unfavorable LCEC outcomes with high diagnostic efficiency.

Keywords: acute calculous obstructive cholecystitis, cholecystectomy.

Abstract. Currently, scientific research is ongoing aimed at studying the risk factors for unfavorable outcomes of LCEC in ACC, the characteristics of the development of difficult surgical options, and the causes of postoperative complications [1]. According to the results of modern research, both clinical factors, including the duration of the disease, the severity of the inflammatory process and comorbidities, and local morphological changes in the gallbladder affecting its wall, neck, Hartmann's pouch (HP), and surrounding tissues are of decisive importance in the development of an unfavorable course of LCEC [2, 7]. Understanding the mechanisms of the formation of such changes is important for the development of new methods for predicting surgical risk and improving approaches to preventing complications during LCEC [1, 2, 3]. A large number of studies are being conducted worldwide aimed at improving safe LCEC methods, early detection of difficult surgical options, and the prevention of damage to the extrahepatic bile ducts. In their research, V. Casarim et al. [21] studied modern approaches to safe LCEC and the possibilities of preventing severe biliary complications. Liu Y.Q. et al. [23] evaluated the diagnostic efficacy of the Parkland scale in predicting the complexity of LCEC. Hassanefahani M. et al. [23] analyzed current approaches to assessing the risk of "difficult" LCEC in ACC. Moreira E. et al. [21] studied factors influencing the development of unfavorable surgical outcomes. Harada K. et al. [23], as well as W. You et al. [1,22] investigated the potential of using machine learning methods to predict the complexity of LCEC. The results obtained allowed us to significantly expand our understanding of the mechanisms of complex LCEC and identify the most significant clinical and instrumental risk factors; however, most of the proposed systems are primarily focused on assessing the complexity of the operation or the likelihood of access conversion. A number of scientific studies have also been conducted in Uzbekistan on various aspects of surgical treatment of biliary tract diseases and complicated forms of cholelithiasis. In the works of A.M. Khodjibaev

et al. [4,10,11,13], as well as A.G. Mirzakulova et al. [2,3,4,5,14] present the results of improving surgical tactics for biliary pathology. The studies of Sh.I. Karimov et al. [1,4,12,14,17], as well as Kh.A. Akilova et al. [1,5,18,23] are devoted to the issues of diagnostics and treatment of complications of bile duct diseases. In the work of Z.B. Kurbanyazov et al. [2,20,21,22], S.R. Rasulov et al. [2,6,8,15,16], as well as N.A. Ergashev et al. [1,6,7,19] modern approaches to surgical treatment of complicated forms of cholelithiasis (GSD) are studied. The conducted studies have made a significant contribution to the development of domestic hepatobiliary surgery and improved treatment outcomes for patients with various types of biliary pathology. It should be noted that the presented studies focused on the factors contributing to difficult LCEC, the reasons for access conversion, individual intraoperative complications, and improving the technical aspects of the procedure. However, the patterns of sequential development of adverse LCEC outcomes, which combine clinical, instrumental, and intraoperative changes into a single pathogenetic chain of complications, remain insufficiently studied. Therefore, conducting a comprehensive clinical study aimed at identifying patterns of adverse LCEC outcomes, developing a system for predicting them, and an algorithm for differentiated surgical tactics in ACC is of significant scientific and practical interest.

The aim of the study was to improve the results of laparoscopic cholecystectomy for acute calculous cholecystitis by developing and implementing a clinical and instrumental method for predicting the degree of surgical complexity.

Materials and methods. The study was conducted at the Abu Ali Ibn Sina Bukhara State Medical Institute. The study analyzed the examination and surgical treatment results of 184 patients with acute calculous cholecystitis who underwent laparoscopic cholecystectomy on an emergency or urgent basis between 2023 and 2026. Depending on the diagnostic and treatment strategy used, all patients were divided into two clinical groups. Accordingly, the conditions for dividing patients into a control and main group were based on a comparison of two groups comparable in size, which formed the basis for a comparative assessment of the results of traditional and improved approaches to surgical treatment of patients with ACC, and in accordance with this, we defined the criteria for inclusion of patients in the study as the inclusion of patients with a clinically, laboratory and instrumentally confirmed diagnosis of ACC who underwent LCEC on an emergency or urgent basis during hospitalization.

Research results and discussion. Based on the medical history records, we recorded the presence of 619 subjective signs of ACC, which averaged 3.36 complaints per patient, and in general, the clinical picture of the disease in both study groups was typical for ACC, where the most frequent complaint in all examined patients was pain

in the right hypochondrium (184/184 patients), which was noted in all patients (100%) regardless of the observation group, but among the accompanying subjective signs of manifestations, the most common were nausea (133/184 patients or 72.3% of cases), fever (87/134 patients or 47.3% of cases), bitterness in the mouth (81/184 patients or 44.0% of cases) and vomiting (77/184 patients or 41.8% of cases), while general weakness was recorded somewhat less frequently (57/184 patients or 31.0% of cases), and it should be noted that with a comparative When analyzing statistically significant differences in the frequency of individual complaints between the control and main groups of patients, we did not identify any.

The analysis of the total frequency of complaints also did not reveal any significant intergroup differences, where the average number of complaints per 1 patient was 3.3 units in the control group and 3.4 units in the main group ($t=0.51$; $p=0.611$), which already at this level can be concluded that the study groups are comparable in the nature of subjective clinical manifestations of the disease at the time of admission to the hospital and allow us to exclude the influence of initial differences in clinical symptoms on the results of subsequent comparative analysis, which we also discovered when analyzing the data of the disease history, which was characterized by comparability between patients in the control and main groups, and the analyzed parameters of the ACC development history we recorded in total in the amount of 436/184 records, which on average accounted for 2.37 units per 1 patient from the total sample, and in the control group there were 209/91 units, which on average accounted for 2.3 units per 1 patient, while in the control group of patients this indicator was 227/93 with a distribution of 2.44 units per patient at $t = 1.11$ and $p = 0.268$, in accordance with the specified, most often (44.6% of cases or 82/184 patients) patients were admitted to hospital within <48 hours from the onset of the disease, while the proportion of this category of patients was 42.9% in the control group and 46.2% in the main group ($p = 0.649$), and the proportion of patients who were hospitalized in the clinic in the period from 48 to 72 hours, as well as later than 72 hours from the onset of the disease, did not differ significantly between the study groups and in total they were noted in 28.3% and 27.2% of cases, or in 52/184 and 50/184 patients, respectively.

Conclusions. In total, in the general sample of patients, we found the presence of 257/84 comorbidities, which on average accounted for 1.4 units per 1 patient. If among patients in the control group this indicator was 1.35 units, then among patients in the main group it was already equal to 1.44 units per 1 patient, giving a higher significance to the comorbid background among patients, however, in no case did it reach a statistical difference between the compared groups of patients.

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