

Early Versus Delayed Laparoscopic Cholecystectomy for Acute Cholecystitis: A Single Center Experience

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Abstract

Introduction: Acute cholecystitis (AC) represents a public health problem, increasing hospitalization costs, especially determined by the surgical treatment of these patients. Laparoscopic cholecystectomy (LC) has become the therapeutic gold standard, the timing of the intervention: early (ELC) versus late (DLC), is still debated, impacting the results. The primary objective of the study was to compare postoperative outcomes between ELC and DLC. Secondary objectives assessed surgical outcomes from the pre-pandemic period with those from the Covid-19 pandemic.

Material and Methods: A retrospective observational study is presented of 266 patients diagnosed with AC who were admitted to Clinic I of General Surgery, County Emergency Clinical Hospital of Târgu Mureș, from 2018 to 2022. They were classified into the ELC group (<72 hours from the onset of symptoms) and DLC (>72 hours from symptom onset) and were further stratified into pre-pandemic and pandemic cohorts. Data on clinical symptoms, paraclinical data, surgical details, and postoperative course were collected and analyzed.

Discussion: The results confirm fewer conversions to open surgery and reduced hospitalization in the ELC group. The pandemic did not significantly alter the timing of surgeries or patient demographics.

Conclusion: In conclusion, ELC for AC patients offers significant advantages, justifying its preference over DLC. Despite the decrease in the incidence of AC hospitalizations during the pandemic, postoperative outcomes are comparable to those in the pre-pandemic period. Future multicenter studies are recommended for a broader analysis of the efficacy of laparoscopic surgery in emergency settings.

Key words: acute cholecystitis, early laparoscopic cholecystectomy, delayed laparoscopic cholecystectomy, COVID-19, ELC, DLC