

### **Cholecystectomy in Mild and Moderate Acute Pancreatitis: A Retrospective Study**

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#### **Abstract**

*Background:* Cholecystectomy has been a subject of debate regarding its timing and utility in cases of mild and moderately severe acute pancreatitis (AP). We aimed to critically evaluate the role of early cholecystectomy in the management of mild and moderate AP, considering patients' characteristics, associated procedures, and overall impact on patient outcomes.

*Methods:* The study compared the outcomes between patients admitted in a tertiary care surgical center undergoing early (<96h) versus delayed (>96h) laparoscopic cholecystectomy (LC) for mild and moderately severe acute gallstone pancreatitis between January 2019 and December 2022.

*Results:* The study included 54 cases [mean (standard deviation) age, 59.4 (16.5) years; 31 (57.4%) years females]. All patients underwent LC, with 29 cases undergoing a two-phase therapeutic regimen for common bile duct (CBD) lithiasis, consisting of endoscopic retrograde cholangio-pancreatography followed by sequential LC. The early cholecystectomy group (EC) comprised 17 patients (31.5%), while the delayed cholecystectomy group (DC) included 37 patients (68.5%). EC was significantly correlated with lower length of stay (p-value < 0.0001) and significantly lower rate of ERCP usage during perioperative period.

*Conclusions:* EC in the first 4 days after admission provides significant benefits such as prevention of recurrent pancreatitis, reduction in complications, and decreased length of stay for patients with mild and moderately severe AP.

**Key words:** acute pancreatitis, gallstones, surgery, cholecystectomy