

Early Laparoscopic Cholecystectomy for Pediatric Gallstone Pancreatitis

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BACKGROUND

Recent pediatric studies suggest that laparoscopic cholecystectomy (LC) during the index admission of pediatric gallstone pancreatitis reduces unplanned admissions and complications. (1,2) Yet the optimal timing of surgery within the index admission is undefined. We theorize that performing LC within 48 hours of admission for children and adolescents with gallstone pancreatitis can decrease hospital length of stay (LOS) without increasing the incidence of complications compared to children undergoing LC greater than 48 hours from admission.

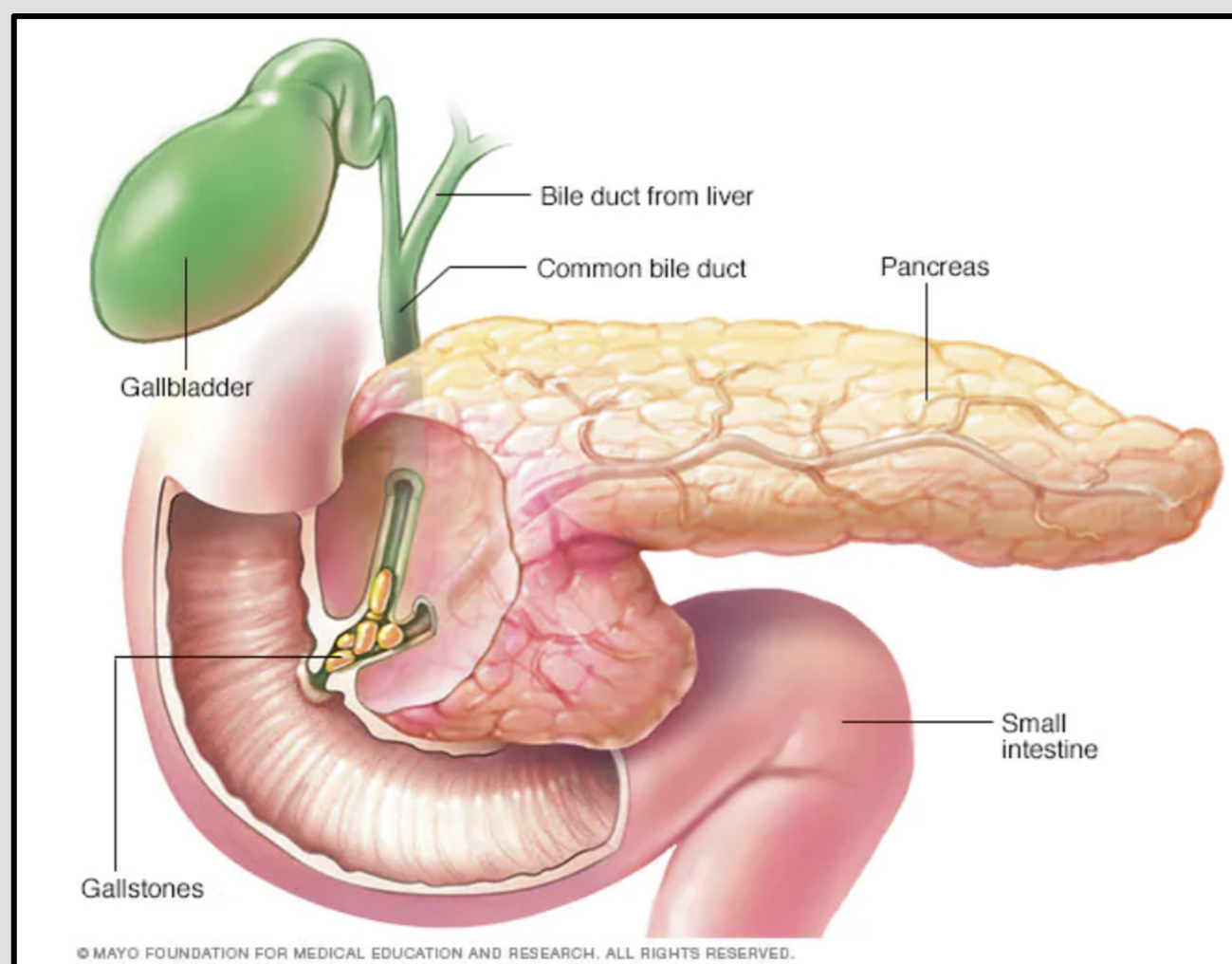


Figure 2. Graphic demonstrating pathophysiology of gallstone pancreatitis. (3)

METHODS

Retrospective review of all pediatric patients (age < 18) admitted to a large tertiary care center with mild gallstone pancreatitis over a 12-year period. Acute pancreatitis (AP) was defined based on the International Study Group of Pediatric Pancreatitis (INSPIRRE) criteria. Patients were stratified into two groups based on timing of LC: less than 48 hours during index admission (<48 hrs) or after 48 hours from index admission (> 48 hrs) including after discharge. Demographics, LOS, and intraoperative and post-operative complications were compared.

RESULTS

Fifty pediatric patients were identified as requiring admission for mild pancreatitis during the 12-year period. Thirteen patients received LC within 48 hours of admission. Demographics did not significantly vary between the 2 groups, notably the preoperative lipase level. Between the subgroups < 48 hrs and > 48 hrs, there was significant difference with respect to total length of stay (2.7 ± 1.9 days vs. 4.1 ± 2.4 days, $p = 0.03$). There were no intra- or postoperative complications in either group.

CONCLUSIONS

Early laparoscopic cholecystectomy for pediatric gallstone pancreatitis patients within 48 hours of their index admission can decrease length of hospital stay with equivalent operational success when compared to surgical intervention after 48 hours of initial presentation.

REFERENCES

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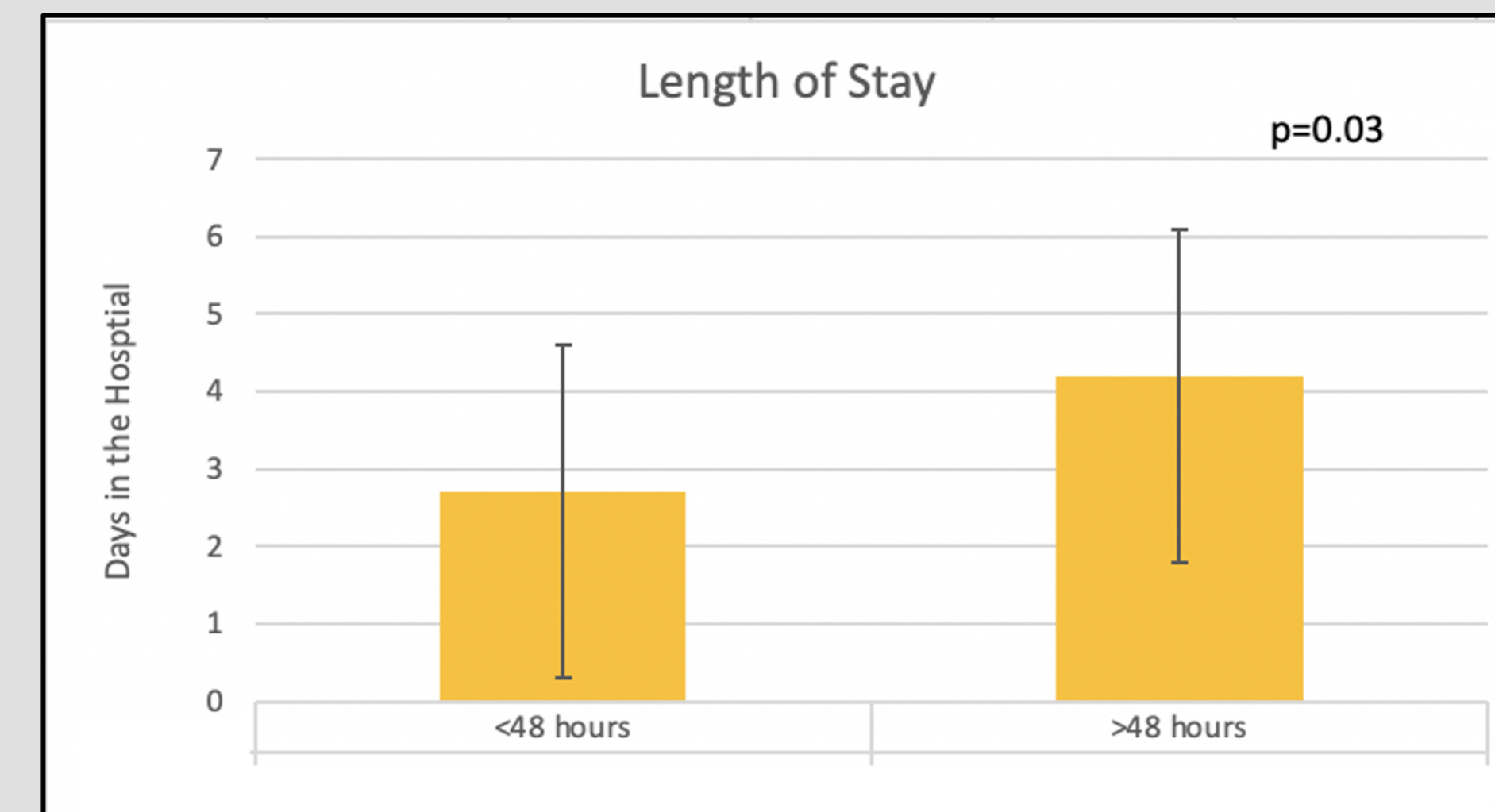


Figure 1. Difference in length of stay between groups that had a laparoscopic cholecystectomy less than 48 hours of admission and those that underwent lap chole more than 48 hours of admission