



Western Surgical Association 2020 Annual Meeting

Monday, November 9, 2020
4:00pm – 6:15pm Pacific Time
– Virtual Meeting --

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Q 7. NON-OPERATIVE MANAGEMENT OF ACUTE CALCULOUS CHOLECYSTITIS IN CIRRHOTIC PATIENTS: IS IT THE RIGHT WAY TO GO?

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Background: Non-surgical interventions in managing cases of acute calculous cholecystitis (ACC) have been proposed, but limited data evaluates such approaches in patients with liver cirrhosis. This study aims to examine long-term outcomes of cirrhotic patients with ACC treated with cholecystectomy compared to initial nonoperative management.

Methods: We conducted a one year (2017) analysis of the Nationwide Readmissions Database and included all cirrhotic patients with a diagnosis of ACC. Patients were stratified into those undergoing operative management at index admission (OP) vs. those receiving antibiotics only or with percutaneous drainage without operative intervention (NOP). Primary outcome measures were procedure-related complications for the OP group and 6-month failure of non-operative management (readmission with cholecystitis) for the NOP group. Secondary outcome measures were mortality, hospital length of stay (LOS), and healthcare costs. Multivariate regression analysis was performed adjusting for demographics and comorbidities.

Results: A total of 3455 cirrhotic patients with ACC were identified: 1538 (44.5%) in the OP group and 1917 (55.5%) in the NOP group. Patients in the OP group were older (63 ± 13 vs. 60 ± 14 years; $p < 0.001$), but comparable in comorbidities CCI (4 [3,5] vs. 4 [3,6]; $p = 0.612$). A total of 18.0% of patients in the OP group had procedure-related complications, while 21.8% of patients in the NOP group failed NOP within 6 months. Mortality was significantly higher in the NOP group compared to the OP group (7.2 vs. 4.3%; $p < 0.001$). Also, patients in the NOP group were hospitalized longer (9 [4,19] vs. 7 [4,13] days; $p < 0.001$) and had higher overall costs (40 [14,47] vs. 31 [10,34] \$1000; $p < 0.001$) over the 6 month period. On multivariate analysis, NOP was independently associated with increased mortality at 6 months (OR 1.8 [1.3-2.4]; $p < 0.001$).

Conclusion: ACC remains a highly morbid disease in cirrhotic patients. One in five patients failed NOP and had longer hospital stays, higher healthcare costs, and increased mortality. Identifying predictors of failure of NOP will better guide patient stratification.