Efficacy of percutaneous cholecystostomy for acute cholecystitis in critically-ill patients: a retrospective study

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Aims: Percutaneous cholecystostomy (PC) has been recognized as a useful approach in high-risk patients affected by moderate or severe Acute Cholecystitis (AC). No consensus exists for the further management of these patients. The aim of this study is to analyze the outcome of the patients undergoing PC for AC in our surgical department.

Methods: We reviewed all patients treated with a US-guided, transhepatic PC in our institution for moderate or severe AC from 2011 to 2014, in order to analyze the subsequent operative or conservative management, complication and readmission rates. Clinical success was defined as symptoms relief, fever, C-Reactive protein and white blood count improvement within 72 hours.

Results: 33 patients were analyzed. Table 1 shows general characteristics and differences between the two groups. Life expectancy was calculated by the Italian National Registry. Results are reported in Table 2. Procedure-related complications were: 1 Ascites (grade 1), 2 Abscesses (grade 3), 3 Bleeding (grade 2 and 1 grade 4 due to hepatic laceration), 6 Catheter dislocations (grade 3 and 4 grade 1). During a median follow-up of 12 months, 3/25 patients (12%) had further hospital readmission: 1 for moderate acute cholecystitis, 1 for mild acute pancreatitis and 1 for elevation of cholestasis enzymes. 8/33 patients (24.2%) had a Delayed Cholecystectomy (DC): 4/8 during the first admission and 4/8 in elective setting (after a median of 11.2 days and 121 days respectively). 1/8 patient underwent a laparoscopic DC while 7/8 patients had a planned open DC. Surgery-related morbidity was 87.5%: We observed 1 main biliary tract lesion (grade 3), 3 bleeding (2 grade 2 and 1 grade 3), 2 wound infections (grade 2) and 1 abscess (grade 2). No further hospital readmission was seen within 6 months.

Conclusions: PC is a safe and effective treatment in high-risk patients affected by moderate or severe AC. The further surgical management requires careful consideration on an individual case considering the high morbidity rate related to this procedure.

References: