DOES PTGBD AFFECT SURGERY TIME AND HOSPITAL STAY IN ACUTE CHOLECYSTITIS? A SINGLE-CENTER RETROSPECTIVE STUDY

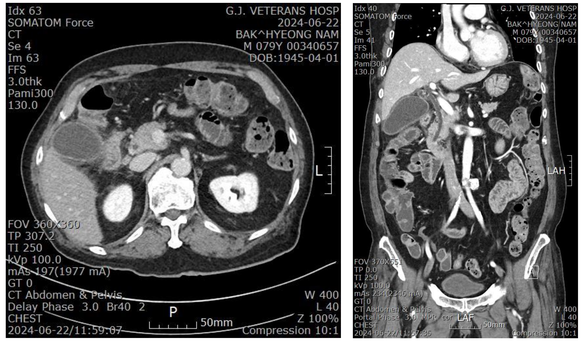
Won Hyung Cho, phD, MD; Jang Won Seon, MD; Jin Mo Park, MD; Gwangju Veterans Hospital

INTRODUCTION: This study examines the influence of the ASA(American Society of Anesthesiologists) score and percutaneous transhepatic gallbladder drainage(PTGBD) on surgery time and hospitalization duration in patients with cholecystitis. PTGBD is often applied in severe cases of acute cholecystitis, and this study aims to determine its effect on surgical outcome.

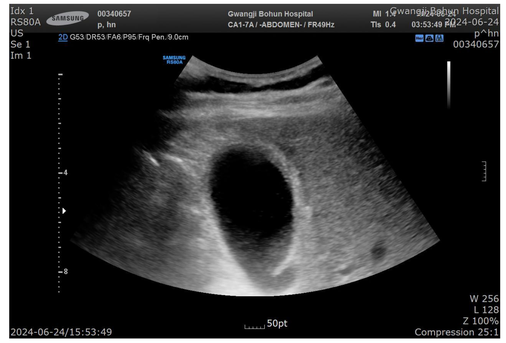
METHODS AND PROCEDURES: A retrospective review was conducted on 75 patients who underwent cholecystectomy, either with or without PTGBD, between September 2023 and August 2024. All PTGBD procedures were performed via a transhepatic approach by a single surgeon using ultrasound guidance and local anesthesia.

RESULTS: Out of 75 patients, 69 underwent laparoscopic cholecystectomy, while 6 underwent open cholecystectomy. Among the patients, 42 were diagnosed with acute cholecystitis and 33 with chronic cholecystitis. A total of 35 patients with acute cholecystitis and 2 with chronic cholecystitis underwent PTGBD before surgery. Most patients had ASA scores of 2 or 3, reflecting advanced age and underlying conditions.
The average hospital stay was 27.9 days for acute cholecystitis patients and approximately 20 days for those with both acute and chronic cholecystitis. The interval between PTGBD and cholecystectomy averaged 28.1 days for both acute and chronic cases.
Statistical analysis showed that the ASA score did not significantly impact surgery time(ANOVA; p: 0.770) or hospital stay(ANOVA; p: 0.670). Similarly, in cases of acute cholecystitis, the presence of PTGBD did not significantly affect surgery time(independent t-test; t: 1.10, p: 0.362). However, patients who underwent PTGBD had significantly longer hospital stays compared to those who did not receive the procedure(independent t-test; t: 2.39, p: 0.023).

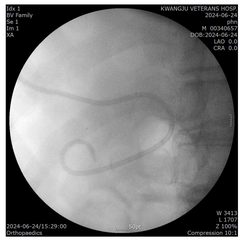
CONCLUSION: PTGBD does not significantly impact surgery time in acute cholecystitis but is associated with longer hospital stays. Cholecystectomy without prior PTGBD results in shorter surgeries, though PTGBD is typically necessary for more severe cases, contributing to extended hospitalization. The ASA score had minimal effect on both surgery time and hospital stay, while PTGBD notably extended hospital stay in acute cholecystitis patients.



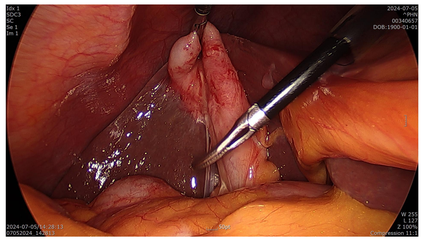
The preoperative CT scans show thickening of the gallbladder wall and pericholecystic infiltration.



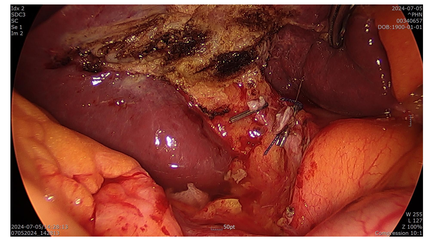
Gallbladder Ultasound for PTGBD shows thickening of the gallbladder wall.



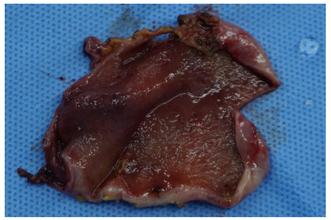
After PTGBD, the pigtail catheter is positioned inside the gallbladder.



This is the gallbladder observed during laparoscopic cholecystectomy



Cystic duct and cystic artery are clamped.



The specimen after laparoscopic cholecystectomy is similar to the findings on CT and Ultrasound. Gallbladder biopsy was acute cholecystitis.

VHS Gwangju Hospital