The Effectiveness And Outcome Of Percutaneous Cholecystostomy: A Retrospective Study In A Single Institute

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INTRODUCTION

Percutaneous cholecystostomy (PC) is often done in patients with acute cholecystitis with multiple underlying illnesses or unfit for cholecystectomy. The outcome and the efficacy of the procedure can always vary due to many factors such as the severity of acute cholecystitis, the patients' age and comorbidities, and other ongoing illnesses during each hospital admission.

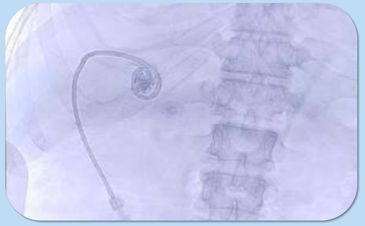
OBJECTIVE

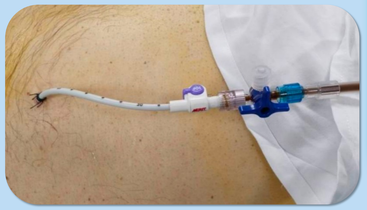
To assess the effectiveness and analyze the outcome of percutaneous cholecystostomy at our hospital.

METHODS

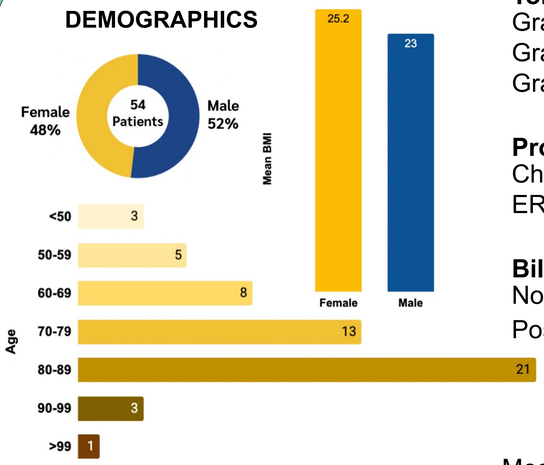
We did an observational retrospective cohort study on patients who underwent percutaneous cholecystostomy at Bhumibol Adulyadej Hospital, Royal Thai Air Force, Thailand from March 2019 to May 2023. We collected the basic demographics (age, sex, BMI), diagnosis, length of stay, bile culture, number of cases with surgical intervention, morbidity and mortality, number of drainage days, and date of most recent follow-up to assess the patients' well being. The severity of the cases were categorized using the Tokyo guideline 2018.







RESULTS



Severity Assessment of Acute Cholecystitis, Tokyo Guidelines 2018, *n*

Grade I (Mild)	1 (2%)
Grade II (Moderate)	27 (50%)
Grade III (Severe)	26 (48%)

Procedures Performed Following PC Removal, *n*

Cholecystectomy	8 (14.8%)
ERCP	5 (9.3%)

Bile Culture Collection, *n*

No Growth	28 (47%)
Positive culture	
E.coli	7 (29.1)
Klebsiella pneumoniae	18 (75%)
Others	7 (29.1)

Mortality, *n*

30-day Mortality	17 (31.5%)
Cardiac/Respiratory Mortality	11 (20.3%)

Mean Drainage time, *days*	54 (3 - 144)
Mean Hospital Length of Stay, *days*	20 (1 - 71)
Mean Duration from PC Placement to Follow-up date, *days*	166 (1 - 1457)

CONCLUSION

Percutaneous cholecystostomy is undoubtedly effective as an alternative intervention prior to cholecystectomy and in patients with higher risks, can be a definite treatment. However, there is still more to explore regarding indications on patient selection for percutaneous cholecystostomy.