ABSTRACT SUBMISSION

The role of percutaneous cholecystostomy in the management of acute cholecystitis in critically ill surgical patients, a single-centre experience, UK

Mr Adel Hamed MBBS, MD, MRCS (Eng)[1]
Dr Syra Dhillon BSc MBBS[1]
Mr Mohamed Saleem MBBS, MRCS[1]
Professor Mansoor Khan MBBS, PhD, MBA, FRCS (Gen Surg), FEBS (Gen Surg), FACS, CMgr, FCMI, AKC[1]
Mr Krishna K Singh MBBS, FRCS (Eng), FRCS (Glas), FRCS (Gen)[1]
Mr Muhammad S Sajid MBBS, MD, MSc, MBA, FRCS[1]

[1] Department of General Surgery, Royal Sussex County Hospital, Brighton, BN2 5BE

Objective:

Percutaneous cholecystostomy (PC) is a minimally invasive procedure that aims to stabilise critically unwell patients with acute cholecystitis. Particularly important for poor surgical candidates, PC facilitates therapeutic benefit with fewer complications[1] and allows patient stabilisation before definitive cholecystectomy[2]. A large 2018 study demonstrated the role of PC to be as effective as emergency laparoscopic cholecystectomy, with no significant difference in mortality[3]. There are no UK national guidelines for the safe practice of PC. This study reports the outcomes in patients admitted as emergency cases undergoing PC for acute cholecystitis.

Methods:

This was a retrospective descriptive study evaluating 24 consecutive patients admitted with acute cholecystitis to a tertiary centre, and underwent PC from 1st May 2019 to 27th January 2021. The data was collected and analysed on Microsoft Excel.

Results:

The mean age of patients was 76.1 (range 56-107 years), with 16 females and 8 males. 3 patients were admitted with acalculous cholecystitis. Deranged LFTs were seen in 20 patients. Mean duration of antibiotics therapy was 13.1 (7-24) days. The most common indication for PC was failed antibiotic therapy (16 patients) followed by gallbladder empyema (4 patients) and severe frailty in (4 patients). Mean duration for PC drain in-situ was 31.9 (3-164) days. In five patients, the PC drain fell out spontaneously and 9 patients

underwent tubogram before removal. Interval cholecystectomy was performed in 7 patients. No patients died during their acute admission. There were 3 patients with ASA II, 12 patients with ASA III, and 9 patients with ASA IV.

Conclusion:

PC is a safe, established technique to manage acute cholecystitis in critically ill and high-risk surgical patients with favourable outcomes. More research to develop guidelines that identifies suitable patients through emergency admission would be beneficial.

Word count: 378

References:

1. Li M, Li N, Ji W. et al. Percutaneous cholecystostomy is a definitive treatment for acute cholecystitis in elderly high-risk patients. *Am Surg*. 2013;79(5):524–527.
2. Huang CC, Lo HC, Tzeng YM et-al. Percutaneous transhepatic gall bladder drainage: a better initial therapeutic choice for patients with gall bladder perforation in the emergency department. Emerg Med J. 2007;24 (12): 836-40.
3. Loozen Charlotte S, van Santvoort Hjalmar C, van Duijvendijk Peter, Besselink Marc GH, Gouma Dirk J, Nieuwenhuijzen Grard AP et al. Laparoscopic cholecystectomy versus percutaneous catheter drainage for acute cholecystitis in high risk patients (CHOCOLATE): multicentre randomised clinical trial BMJ 2018; 363 :k3965

NHS
University Hospitals Sussex
NHS Foundation Trust