INTERVENTIONAL RADIOLOGY CHOLECYSTOSTOMY POST-PROCEDURAL OUTCOMES

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Purpose of Study

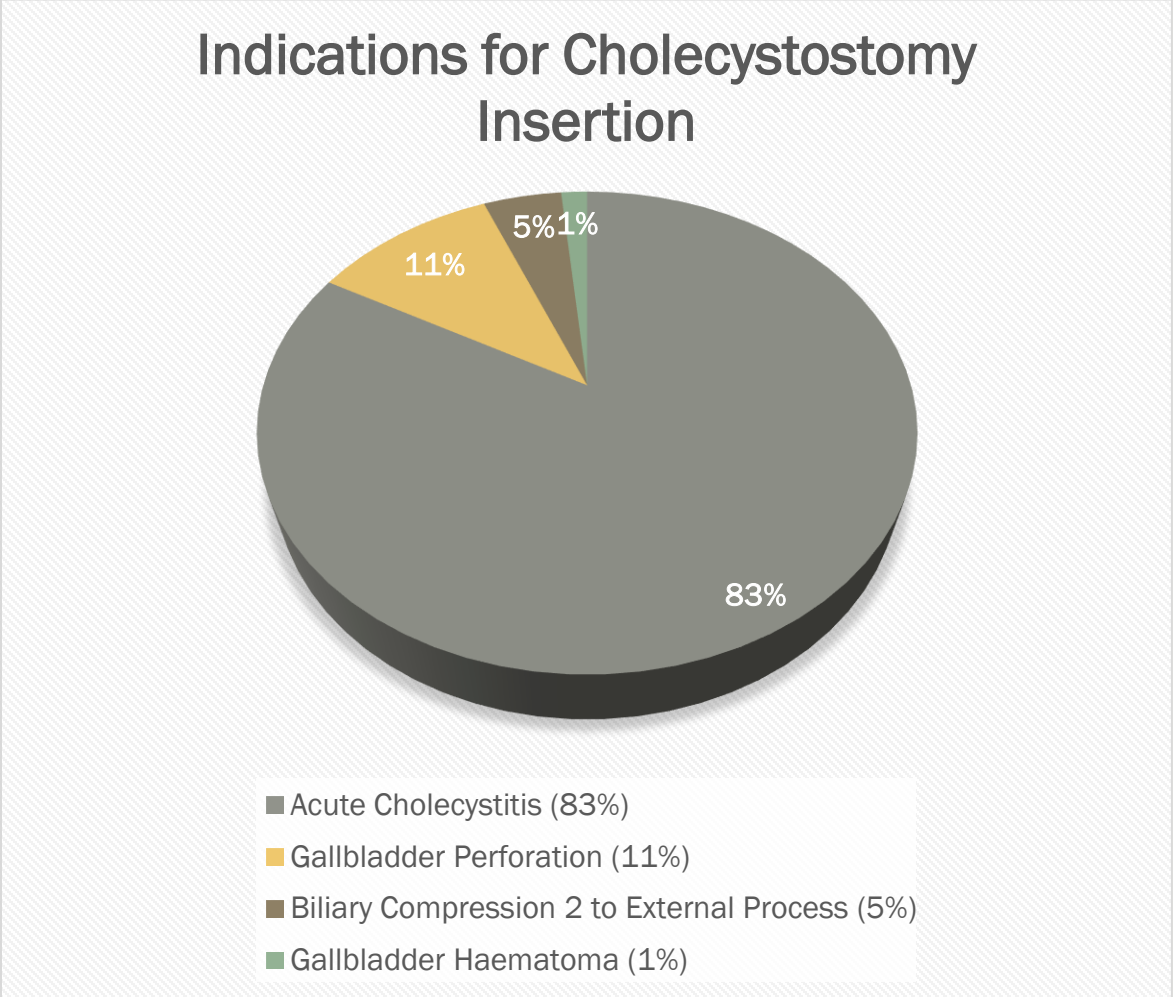
- To assess short- and long-term outcomes of patients post cholecystostomy at a single tertiary referral centre.

Materials & Methods

- A retrospective review of consecutive patients who underwent percutaneous ultrasound and fluoroscopic guided cholecystostomy tube insertion over a 3 year period (01/01/2015 to 31/12/2017) was performed.
- Patients were identified using NIMIS and the hospital internal computer system.
- Parameters assessed included;
  - *Patient demographics*
  - *Indication and technique of Cholecystostomy*
  - *Cholecystostomy reinsertion rate*
  - *Further biliary intervention*
  - *Mortality*

Results (Demographics)

- There were 64 patients in total (45 male, 19 female).
- Patient age range was 29 to 93, mean age 70 years.
- Acute cholecystitis was the most common indication.
- Other indications included:
  - *Gallbladder perforation*
  - *Gallbladder haematoma*
  - *Gallbladder compression secondary to external processes.*



Results (Technique)

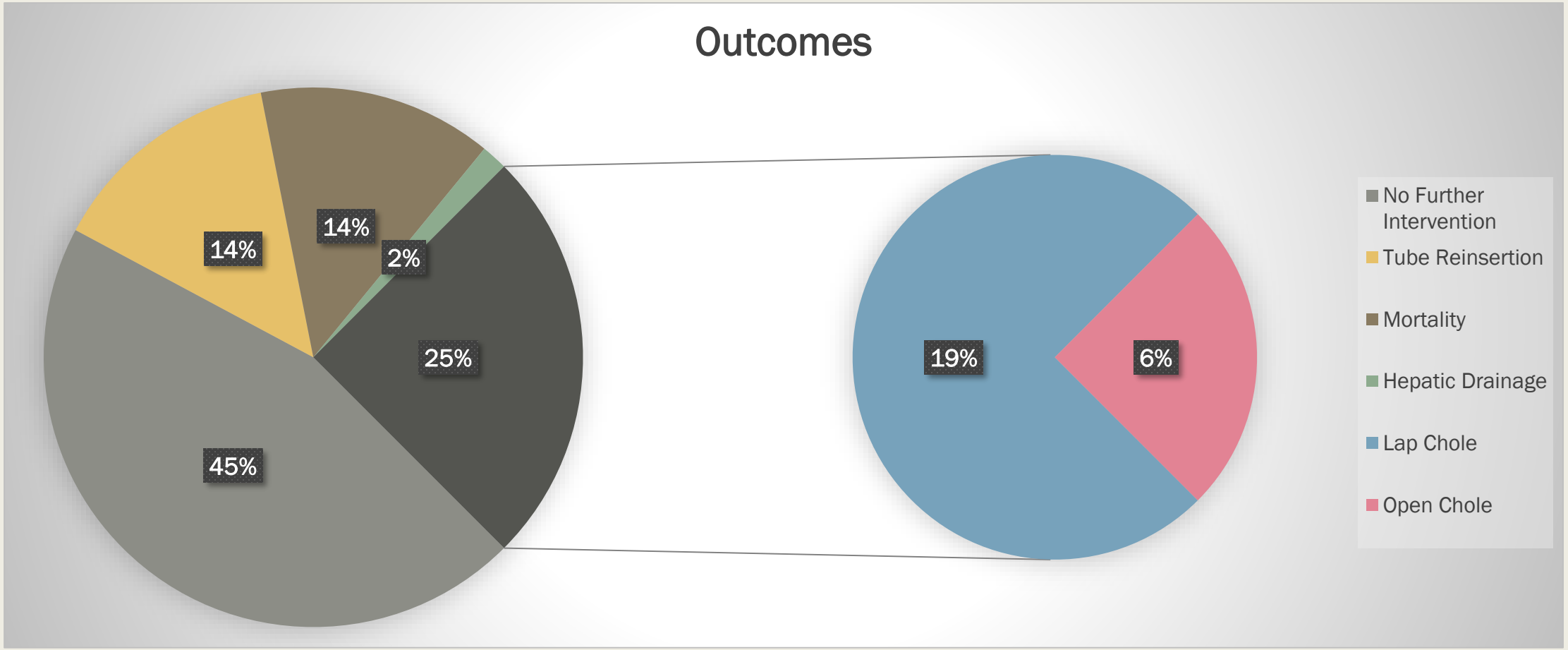
- 49 cholecystostomy drains were inserted via a transhepatic route
- 2 were direct gallbladder punctures.
- Route of insertion was not specified in 13 cases.

- 45 (70%) had a subsequent tubogram to assess patency of the cystic duct.
  - *37 were performed prior to planned catheter removal by the surgical team*
  - *8 were to assess position for dislodgement / decreased drain output.*

Results (Outcomes)

- 16 patients (25%) subsequently underwent cholecystectomy
  - *12 laparoscopic*
  - *4 open*
- 9 patients (14%) had a cholecystostomy reinserted
  - *4 were due to recurrence of symptoms*
  - *5 were due to inadvertent catheter dislodgement*
  - *Time to reinsertion ranged from 2 to 107 days, average 33 days.*
- 29 (45%) had no further intervention post removal of cholecystostomy.
- 1 required subsequent drainage of a hepatic abscess
- 9 patients (14%) died during the recruitment period

Results (Outcomes)



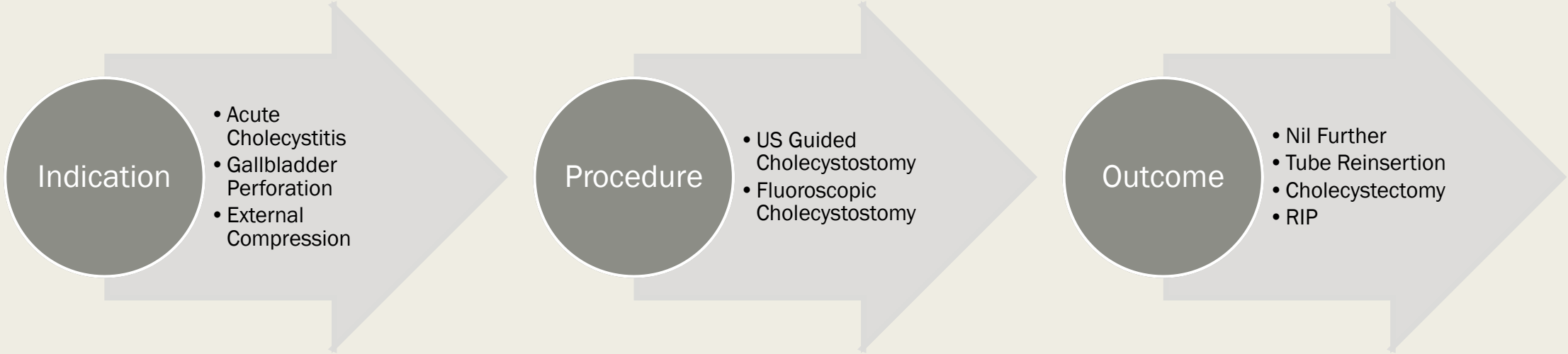
Tube Reinsertion

- 9 patients (14%) required cholecystostomy tube reinsertion.
  - *5 were due to inadvertent catheter dislodgement*
  - *4 were due to recurrence of symptoms after catheter removal*
- Only 4 of 9 had a subsequent tubogram prior to removal of the reinserted catheter

Fig 1: Tubogram showing kinking of the catheter in the abdominal wall, causing obstruction

Conclusions

- Cholecystostomy remains an important treatment method of acute cholecystitis in the short term, or as an alternative treatment option in those unsuitable for surgery.
- 14% of patients who underwent cholecystostomy required catheter reinsertion, which is similar to published literature[1].



References

1. H Paran, R Zissin, E Rosenberg, I Griton, E Kots, M Gutman. “Prospective Evaluation of Patients with Acute Cholecystitis Treated with Percutaneous Cholecystostomy and Interval Laparoscopic Cholecystectomy”. International Journal of Surgery (2006) 4, 101-105