Non-operative management of cholecystitis and biliary colic

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At Northern Health, the number and percentage of non-operative admissions for cholecystitis/biliary colic has been steadily increasing over several years, despite the addition of an Acute General Surgical Unit in 2013.

- Study period: January 2013 – March 2017 inclusive
- Total number of patients: 633
- Mean age: 54.3y (±22.1)
- Female: 412 (65.1%)

In Fig. 1, the increasing trend of non-operative patients discharged with “No acute surgical issue” may be explained by:
- Patients are presenting to TNH at a lower threshold of symptomatic acuity
- Gallbladder pathology is being more readily identified as a potential cause of non-specific symptoms (e.g. epigastric pain, nausea/vomiting, fever)
Subsequent admissions and management

**Figure 2. Rates of subsequent ED admissions for recurrent symptoms following non-operative admission**

- No ED readmissions: 512 (81%)
- ED admit within 7 days: 34 (5%)
- ED admit in 8-90 days: 51 (8%)
- ED admit in 91-365 days: 17 (3%)
- ED admit in 365+ days: 19 (3%)

**Figure 3. Rates of subsequent cholecystectomy following non-operative admission.**

- 65 (10%): Emergency readmission.
- 190 (30%): Elective.
- 378 (60%): No cholecystectomy.

Of all subsequent cholecystectomies, 25% of these (65/255) were performed at emergency readmission.

**Conclusion I:** There are substantial readmission and emergency surgery rates but more analysis is needed to quantify predictive factors for recurrence of cholecystitis and biliary colic.
Percutaneous cholecystostomy was performed in 31 patients (4.9%) during the study period. The average age of these patients was 76.3y (±9.9), which is 23.2y older than those only managed conservatively (p<0.001).

Figure 4. Complications and outcomes associated with percutaneous cholecystostomy at index admission

Conclusion II: Percutaneous cholecystostomy has not been widely implemented at Northern Health, likely due to the associated high complication rate, but remains a viable option for elderly patients with greater risk of complications from surgery.