

Management of Day-case laparoscopic cholecystectomy: A single centric review.

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Introduction

Gallstones, a prevalent gastrointestinal ailment affecting 10–15% of UK adults, often present with upper abdominal pain, aggravated by food intake or complications such as cholecystitis.

Laparoscopic cholecystectomy, preferred for over 98% of patients, offers definitive treatment. While many cases are asymptomatic, symptomatic cases necessitate surgical removal.

Day-case surgery is feasible for most elective cases, although concerns persist regarding patient safety, particularly bleeding and bile duct injury, leading to debate over overnight stays.

Methods

Retrospective data collection from electronic medical records analysed 793 patients who underwent elective laparoscopic cholecystectomy for gallstones between January 2020 and October 2023.

Data was collected on age, gender, BMI, ASA, indications for surgery, operative start time, and operative duration.

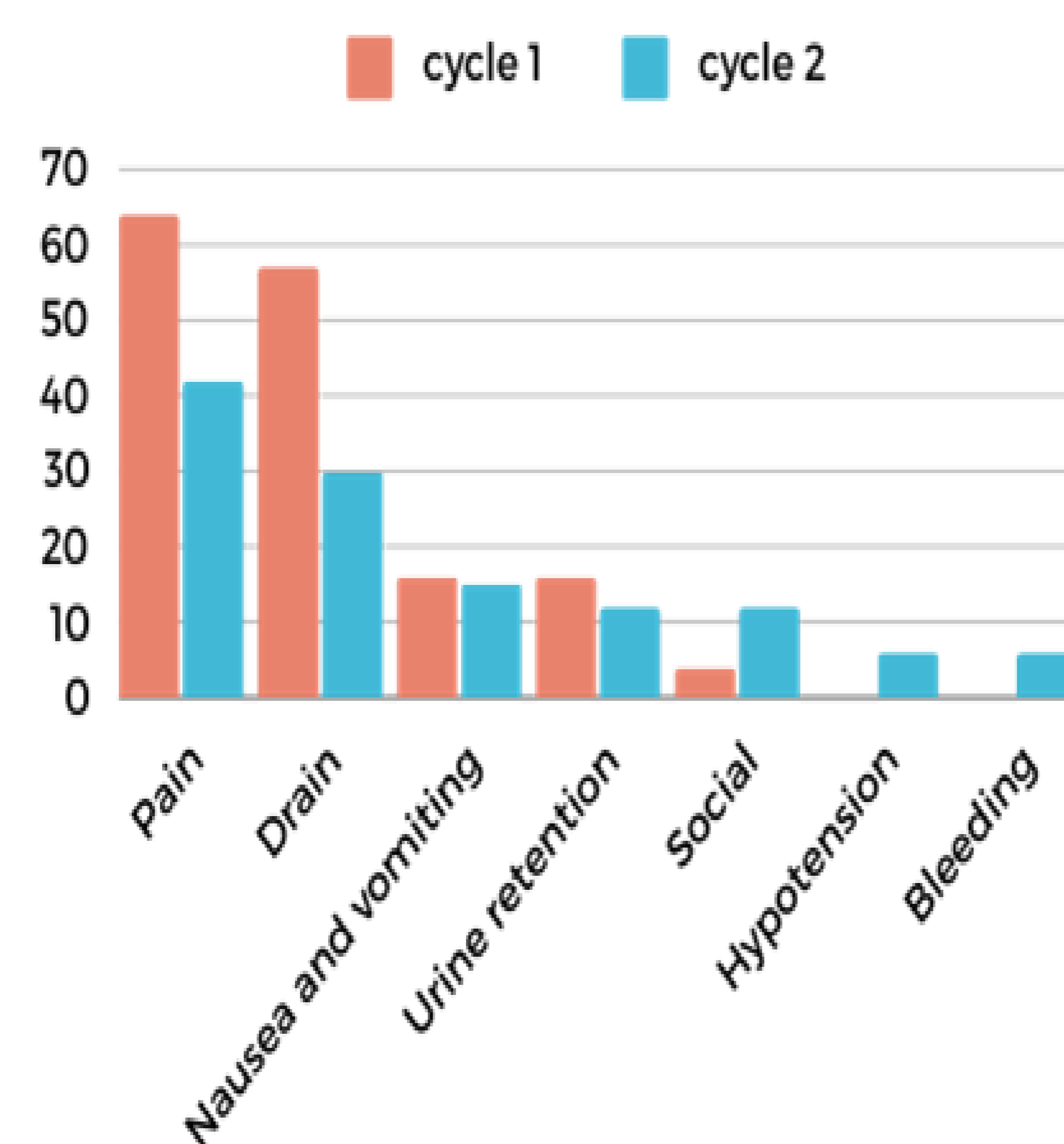
Primary endpoints were rates and causes of unexpected admissions, rates and causes of readmissions and rates of conversion-to-open surgery.

Results

793 patients studied of which 222 (28.4%) patients were unexpectedly admitted overnight

DAYCASE	UNEXPECTED ADMISSION
571(73.2%)	222(28.4%)
Median age 52	Median age 59.5
Females =78.8%	Females =64.8%
Mean BMI=31	Mean BMI=32
OR DURATION= 1 hr 16 min	OR DURATION= 1 hr 16 min

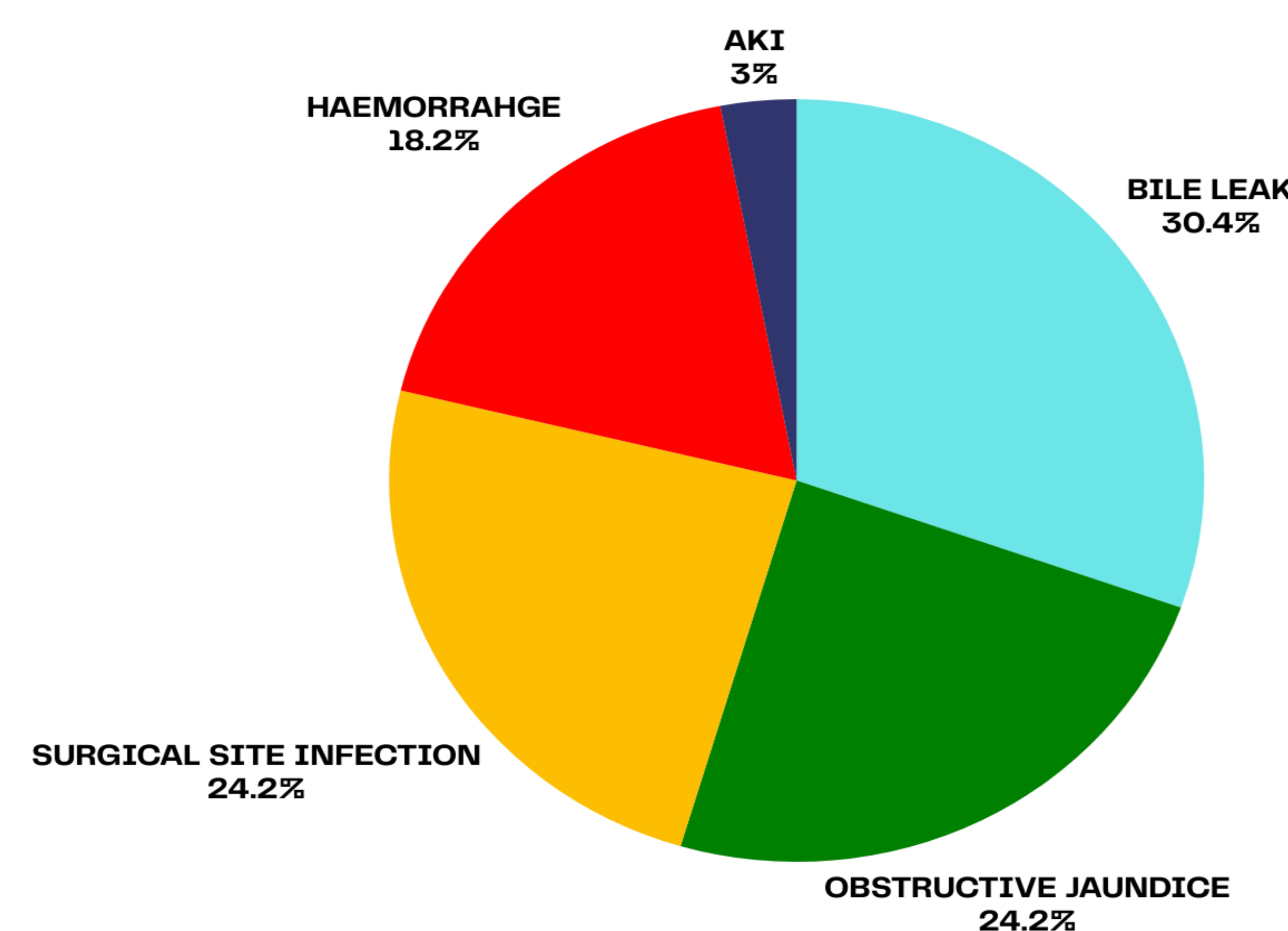
Causes of unexpected admission



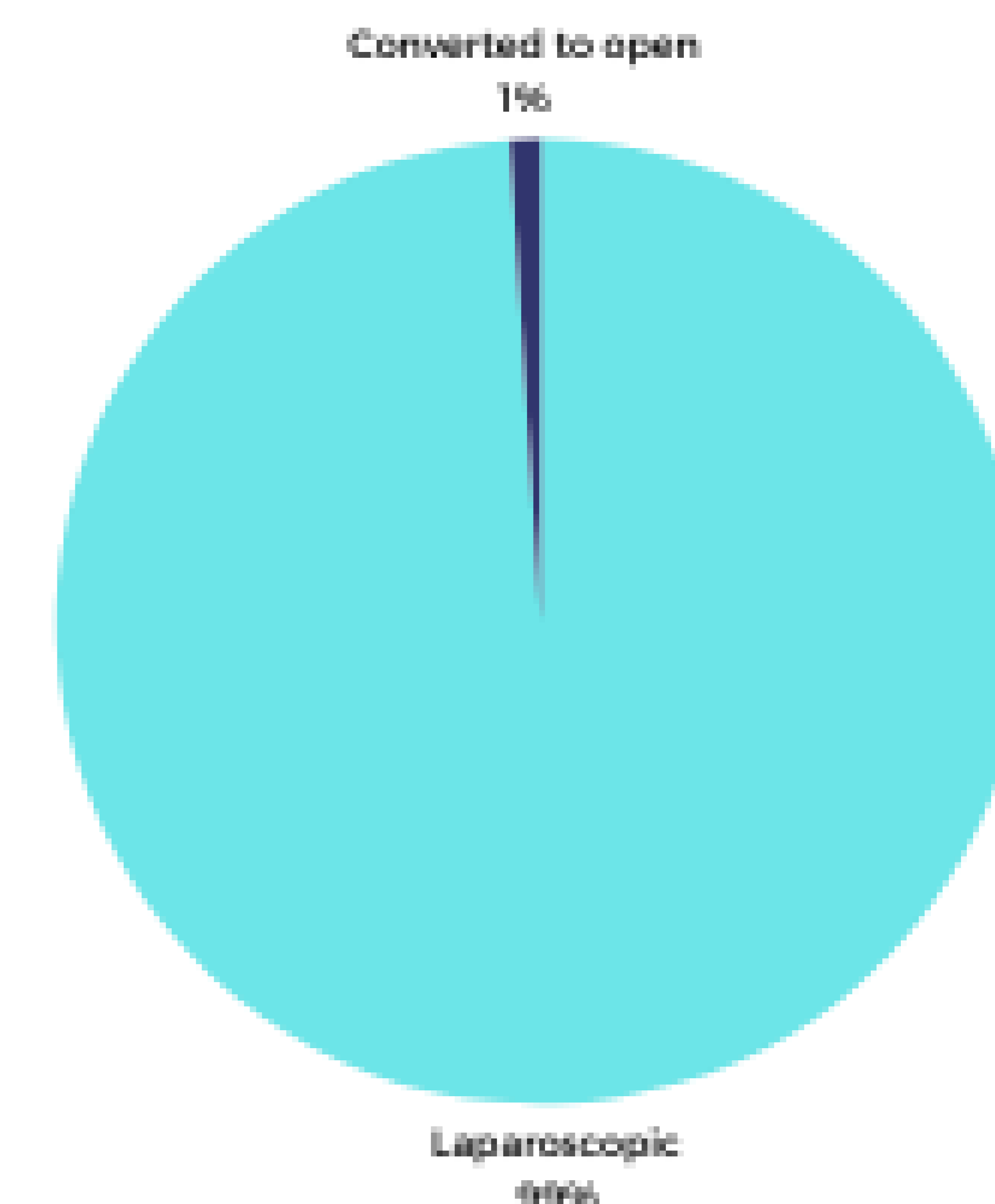
30-day complication rate

4.6%

Causes



Conversion to open rate



222 patients were unexpectedly admitted (28.4%), 144 patients were females (64.8%) and 78 patients were males (35.2%), median age was 59.5 (IQR 25), mean BMI 32.2 (± 16.6), most of the patients had ASA of II. Mean LOS in these patients was 2.8 days (± 2.4). 106 patients had postoperative pain (50.9%), 87 patients had a drain inserted intraoperatively (41.8%), 28 patients had postoperative urinary retention (13.4%), 12 patients were admitted due to social causes (inability to go home by their own at an appropriate time) (7.6%), six patients had hypotension (2.88%) and finally six patients had bleeding either intraoperatively or postoperatively (2.88%).

Mean operative duration was 1 hr 16 min (± 0.24) in the unexpected admission group. Number of operations that started after 12 pm were 172 cases in the first group (30.1%), while 115 patients (55.2%) of the second group had their operations started in the afternoon.

Conclusions

Our review underscores the feasibility and safety of day-case laparoscopic cholecystectomy for symptomatic gallstone patients. Despite concerns regarding unexpected admissions and readmissions, rates observed align with guidelines. The majority of patients successfully underwent laparoscopic cholecystectomy without conversion to open surgery. These findings support the utilisation of day-case laparoscopic cholecystectomy as the standard approach for appropriately selected gallstone patients.