

UC Davis
Radiology

Title

Long-term Percutaneous Cholecystostomy Treatment Course of Patients with Biliary Disease

Permalink

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Data Availability

The data associated with this publication are not available for this reason: NA

Background

- Cholecystectomy is the gold standard treatment for patients with acute cholecystitis.
- Patients who are high risk for complications from cholecystectomy can be offered percutaneous cholecystostomy (PC) tube placement.
- PC can be done to bridge high-risk patients for subsequent, elective cholecystectomy.
- PC can be continued indefinitely with intermittent fresh tube exchanges in patients who remain poor candidates for surgery.
- Gallbladder thermoablation is an emerging, minimally-invasive technique that may be beneficial to patients who are not surgical candidates at the time of acute cholecystitis presentation.

Objective

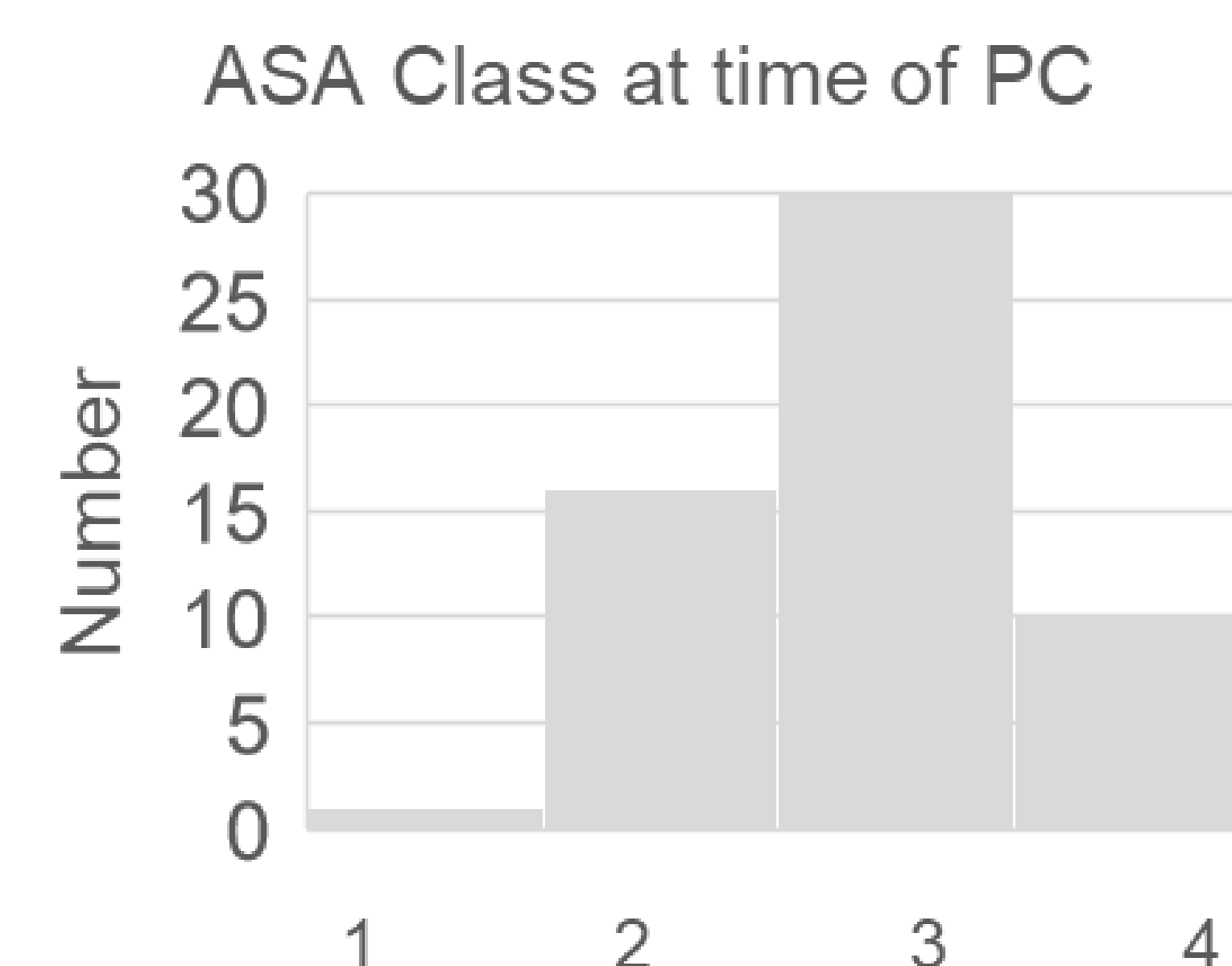
- The study aim was to characterize patients who received PC at a tertiary academic hospital to evaluate the potential population benefitting from gallbladder thermoablation.

Methods

- Retrospective query of electronic medical record for patients who had received a PC tube between 2002-2016, allowing for at least five years of potential follow up time.
- 129 patients were identified to have undergone PC at UC Davis. 122 patients had their initial tube placed by UC Davis.
- Manual chart review to evaluate characteristics of patient population who've received a PC tube, including demographics, radiation exposure, complications, and treatment course.

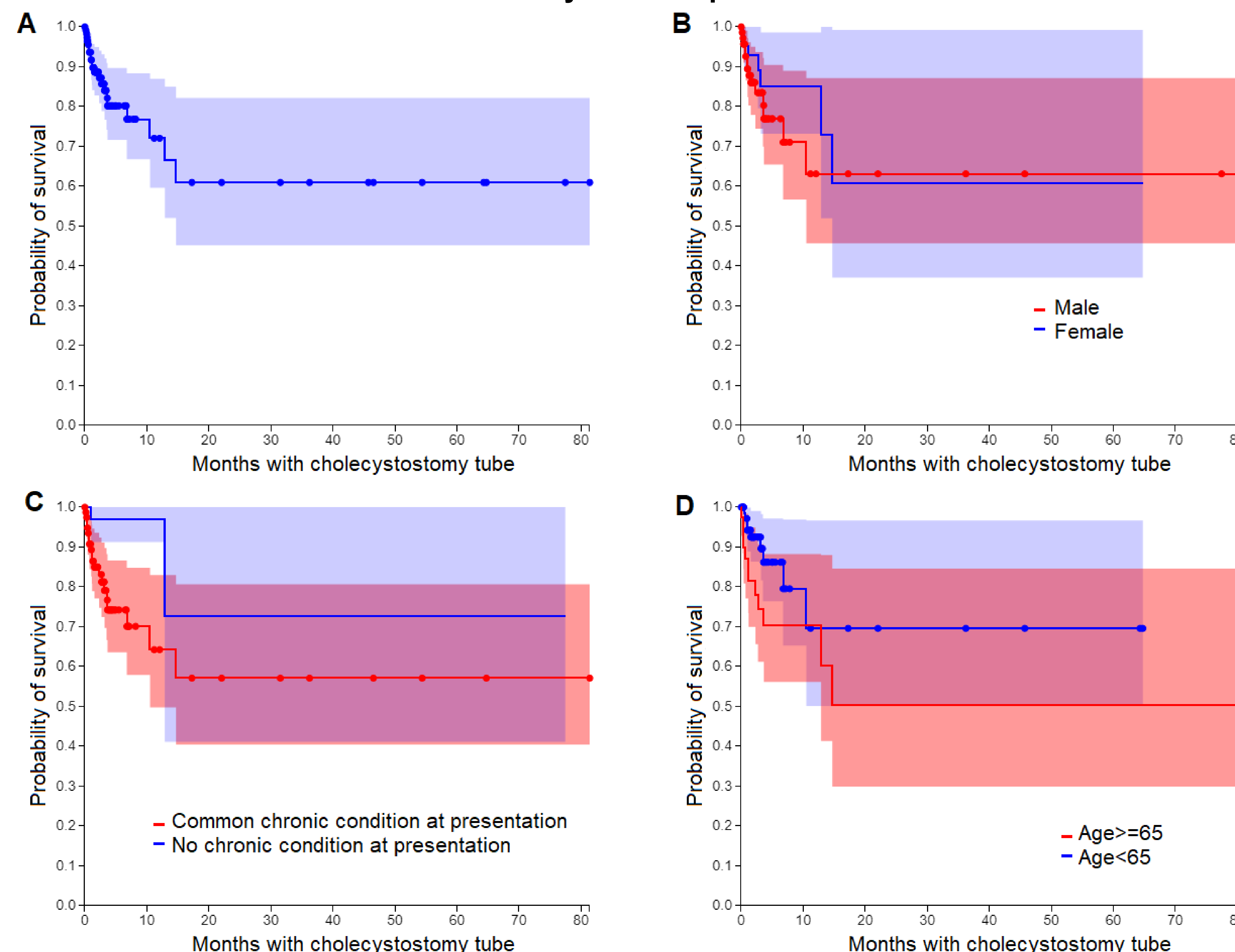
Results

| Demographics at PC placement | | |
|-------------------------------|--|------------|
| Age at PCT (yrs) | | |
| Mean | | 58.67 |
| Range | | 17-98 |
| Weight (kg) | | |
| Mean | | 82.5 |
| Range | | 40.8-176.5 |
| BMI (kg/m²) | | |
| Mean | | 28.5 |
| Range | | 16-62.9 |
| M/F ratio | | 1.6 |



| Days between PC and outcome | | |
|--|------|--------|
| | Mean | Median |
| Removal (n=54) | 95 | 63 |
| Cholecystectomy (n=41) | 162 | 99 |
| Death with tube in place (n=21) | 202 | 36 |

Survivability after PC placement



Analysis

- The age of patients receiving PC was younger (average age <59) and with a wider range of distribution than expected.
- The most common comorbidities were hypertension, coronary disease, and diabetes.
- Most patients were ASA class 2 and 3 at the time of PC.
- Patients who had eventual cholecystectomy or tube removal lived with the tube in place for an average of three to six months.
- Of the patients who died with their PC tube in place (n=21), Kaplan-Meier curve analysis showed no differences in survival when comparing male and female, old and young, and those presenting with or without co-morbid conditions.

Conclusions/Further Study

- This exploratory chart review confirms that there are patients who have indefinite PC who could benefit from minimally invasive gallbladder thermoablation.
- Further study is needed to assess the quality of life of patients receiving indefinite PC treatment, potentially in relation to patients who are also candidates for cholecystectomy and/or gallbladder thermoablation.

References

