

Overview

- Gallbladder disease leads to ~200,000 U.S. hospital admissions annually, with 21.3% of acute cholecystitis patients deemed too high-risk for surgery.
- For these patients, percutaneous cholecystostomy is a common alternative, with a 1000% increase in use from 2005-2014.
- However, chronic catheter use poses an 8-30% complication rate (leakage, dislodgement), affecting quality of life and healthcare costs.

Key Question: Can we eliminate chronic catheter use in high-risk, non-surgical patients?

Aims

- To evaluate safety and efficacy of percutaneous biliary stone removal using Spyglass™ cholangioscopy.

Methods

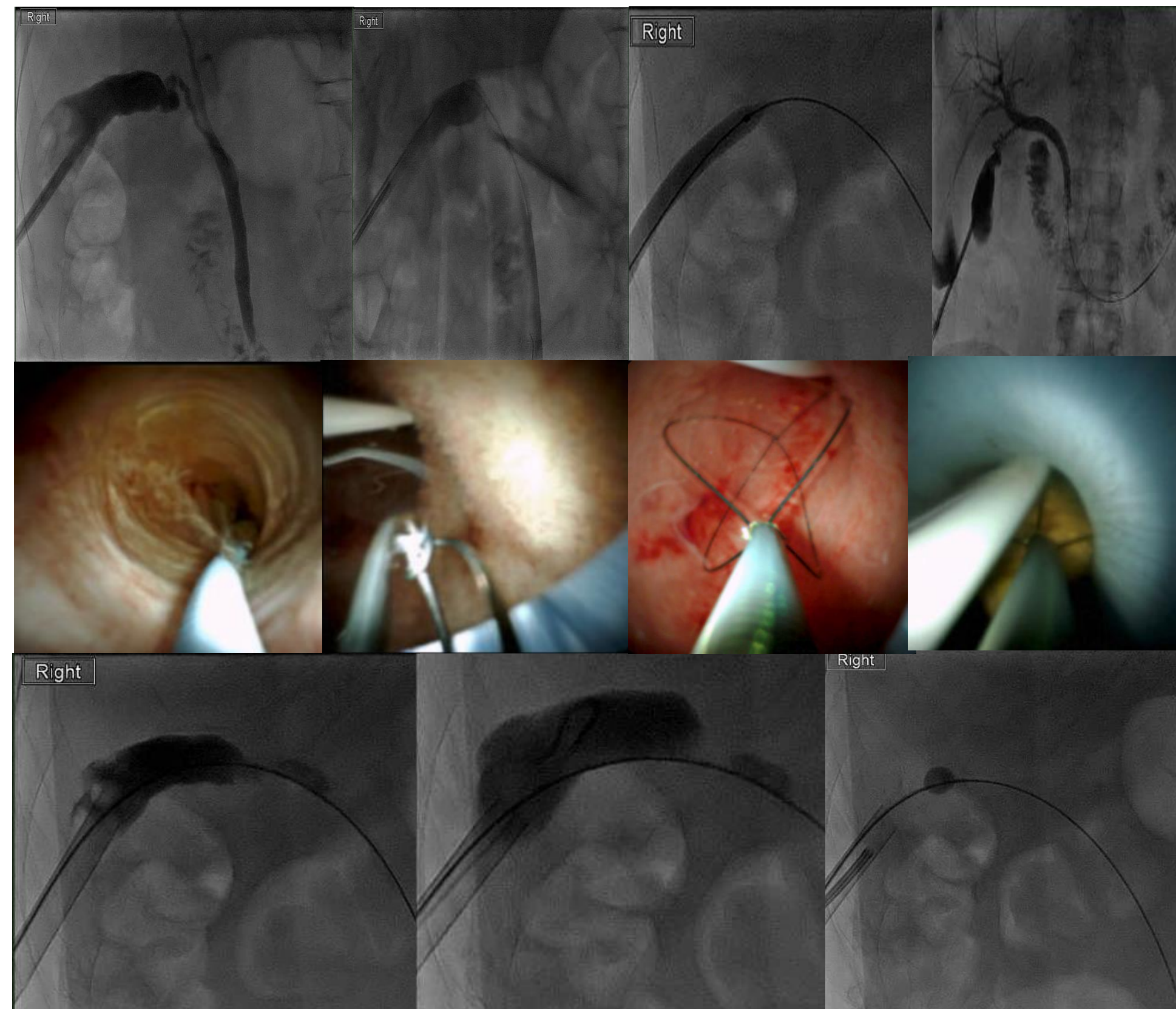
- Retrospective cohort analysis of patients deemed high-risk for surgical and endoscopic biliary disease management from March 2023 to March 2024.

Figure 1. Patient Demographics

Patient	Age	Non-surgical reasons
1	65	CAD, CABG, DM, Cirrhosis
2	83	CVA, Right hemiparesis
3	79	Multiple prior abdominal surgeries
4	97	Dementia, Arthritis, RF, HTN, RBBB
5	69	Multiple prior abdominal surgeries
6	79	HFrEF 33%, IBS, Crohn's disease
7	67	DM2, OSA, HTN, HLD, GERD
8	62	HTN, Opioid/Cocaine abuse, COPD
9	72	ETOH use disorder, Cirrhosis, CAD
10	52	Metastatic gastric NET
11	75	CABG, stents, AICD, A Fib, CHF, CAD, HTN, Diabetes

Figure 2. Patient Categories

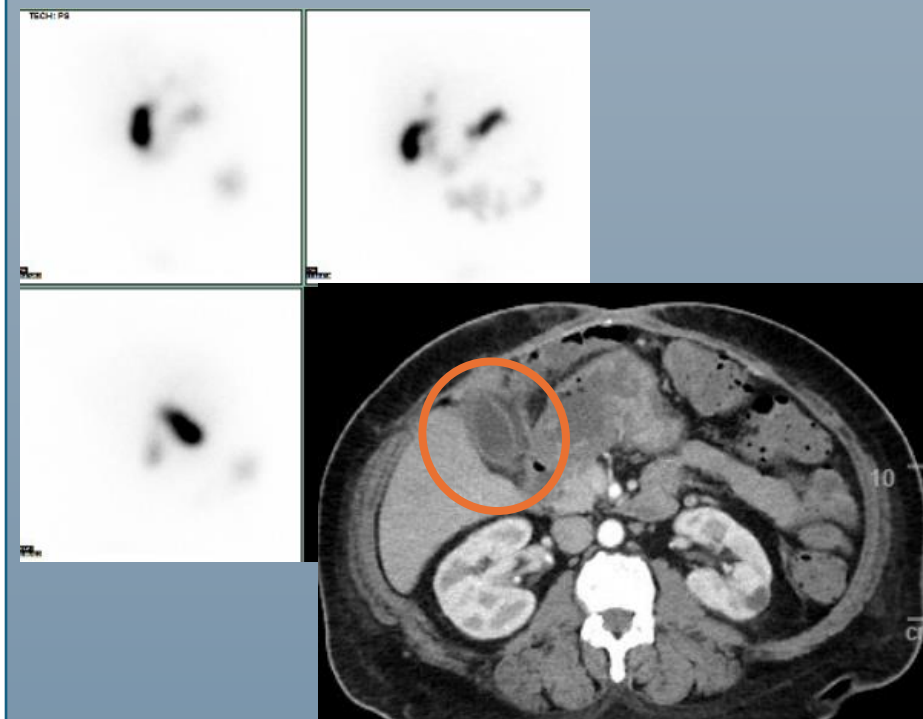
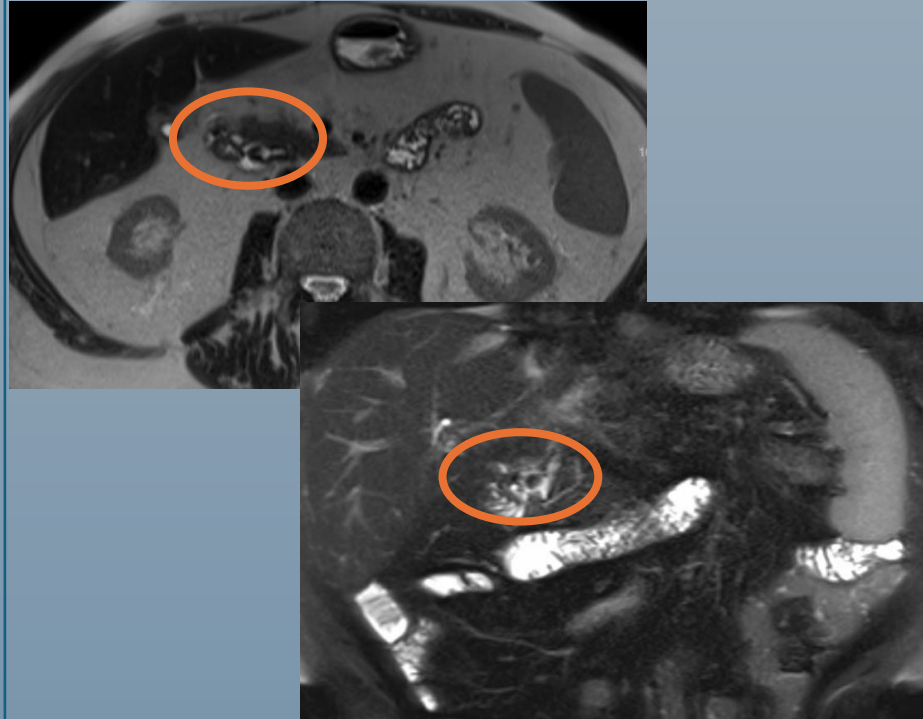
Female (5)	Male (6)
Inpatient (7)	Outpatient (4)
Transperitoneal (5)	Transhepatic (6)
Choledocholithiasis (2)	Cholelithiasis (9)



Results

- Patients were followed for median **214 days**
- At 1month follow-up **100% symptom resolution**
- Median cholecystostomy tube indwelling time was **19 days after stone removal**
- During entire follow-up 2 patient (**18.2%**) developed recurrent symptom at 7months post procedure

Figure 3. Complications

Patient #1	Patient #2
Recurrent cholelithiasis: symptoms 7 months post-procedure	Acute biliary obstruction: spontaneously resolving, possibly due to choledocholithiasis or Lemmel Syndrome.
	

Complications



Limitations

- Limited number of cases
- Short follow up time
- Retrospective Study

Conclusions

- Early experience with cholangioscopy assisted percutaneous biliary stone extraction shows that it is a safe procedure with excellent results at intermediate term follow up in only high-risk patients with recurring calculous cholecystitis.

References

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