Interesting Endoscopic Cases with EUS and ERCP

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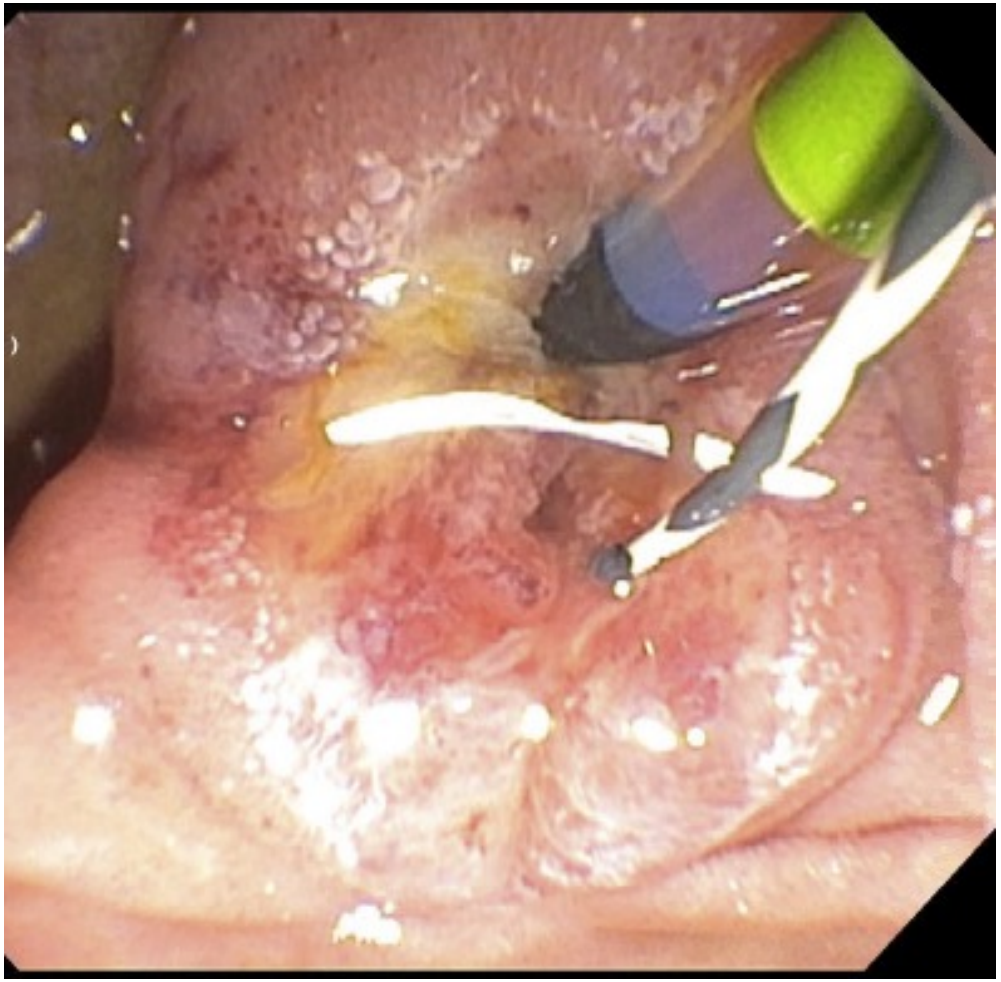
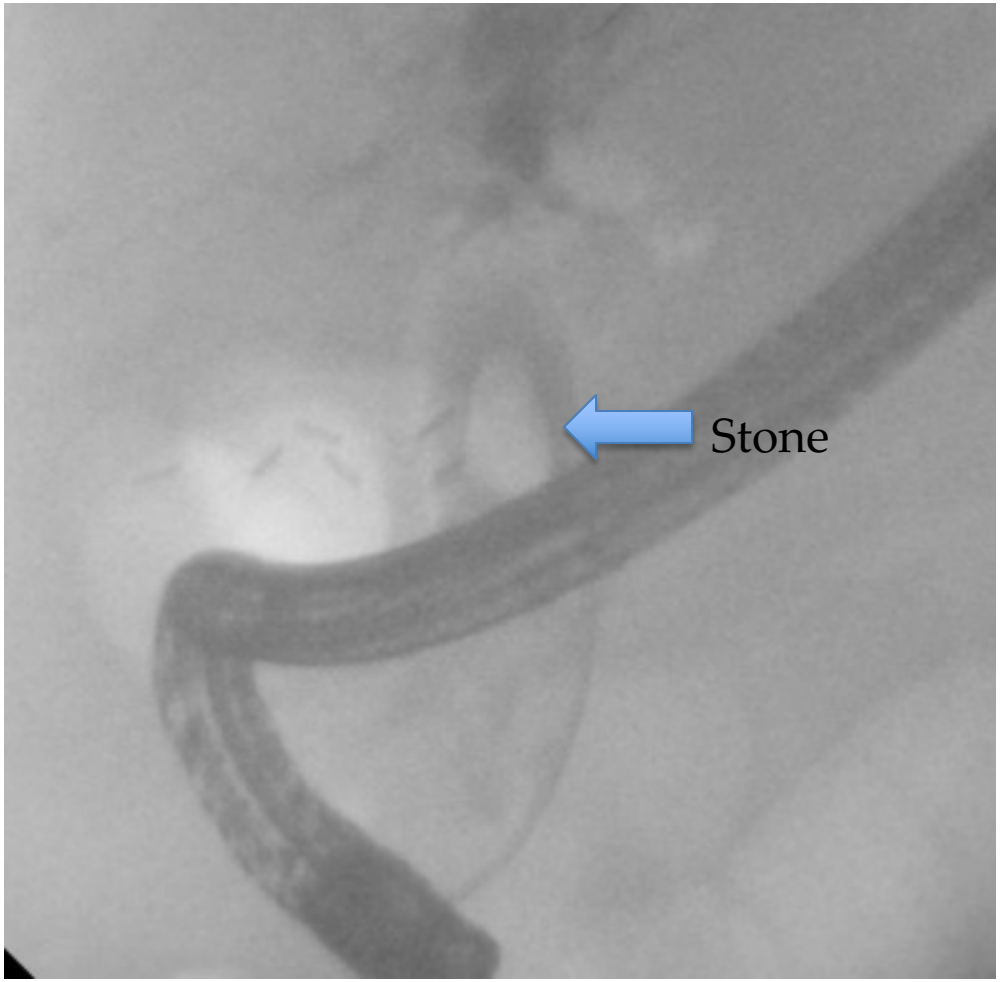
Case #1

- 90 year-old female with HTN, A-fib, hx CCY
  - On Eliquis
- Presents to OSH abd pain, N/V
- Lipase 3500; Alk phos 230; AST/ALT 230/110
- CT a/p with bile duct stones, pancreatitis
- Dx: Gallstone pancreatis
- ERCP x 2 unsuccessful in passing guidewire
- Transferred to our institution for ERCP

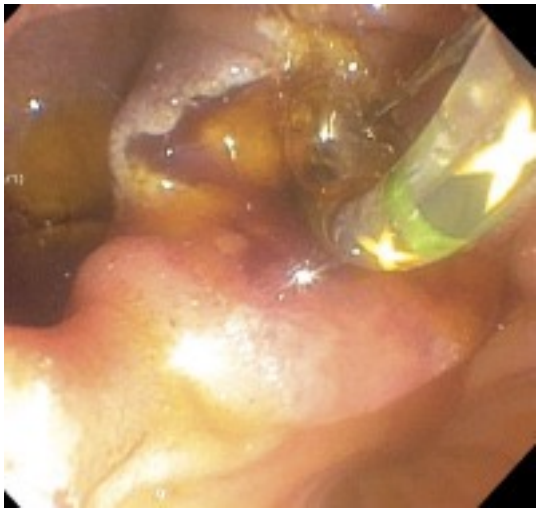
Case #1: Cannulation



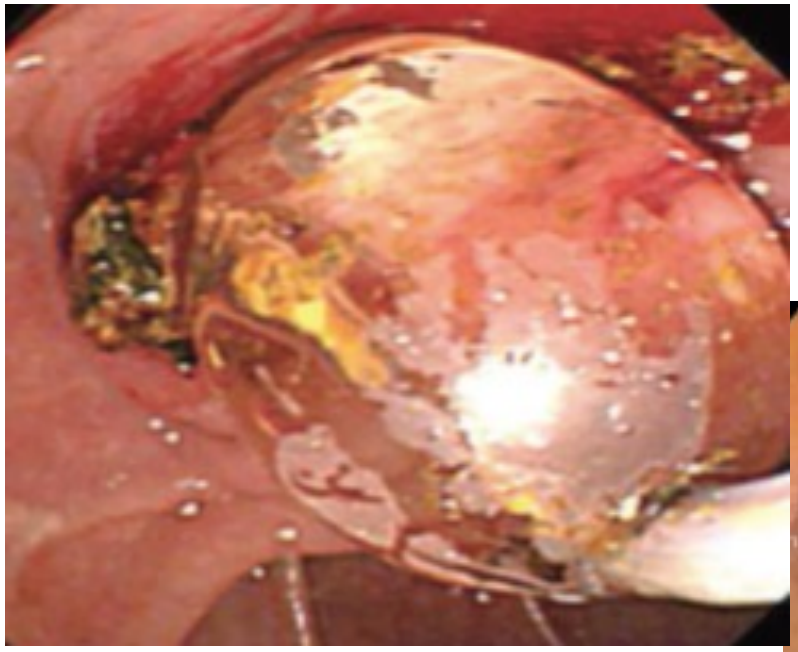
Case #1: Cholangiogram

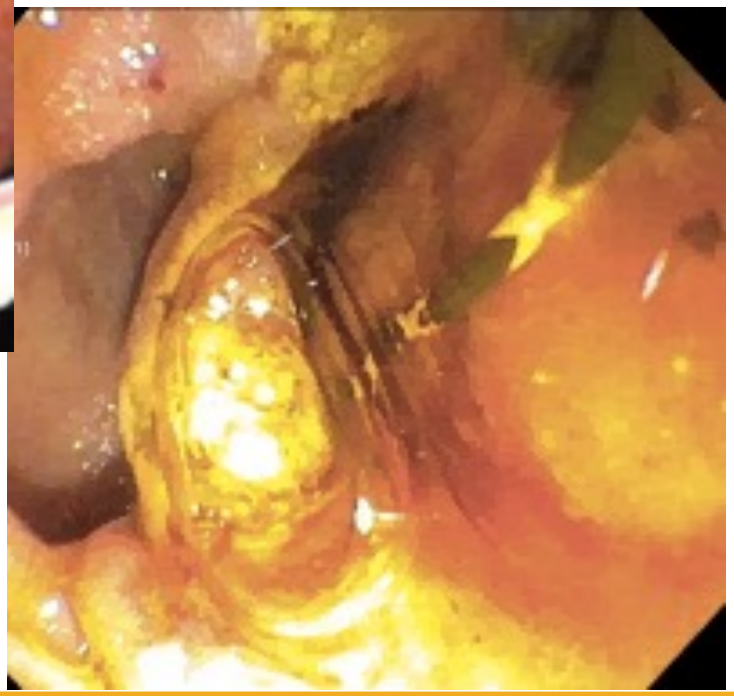


Case #1: sphincterotomy



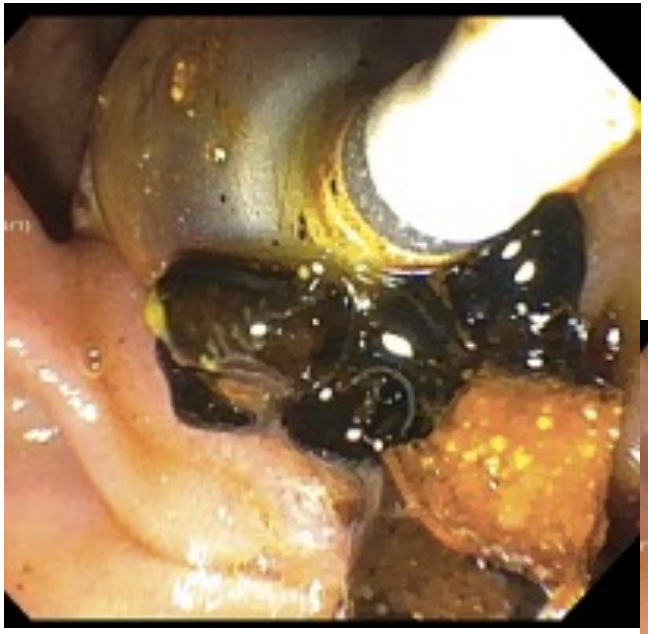
Case #1 Balloon dilation

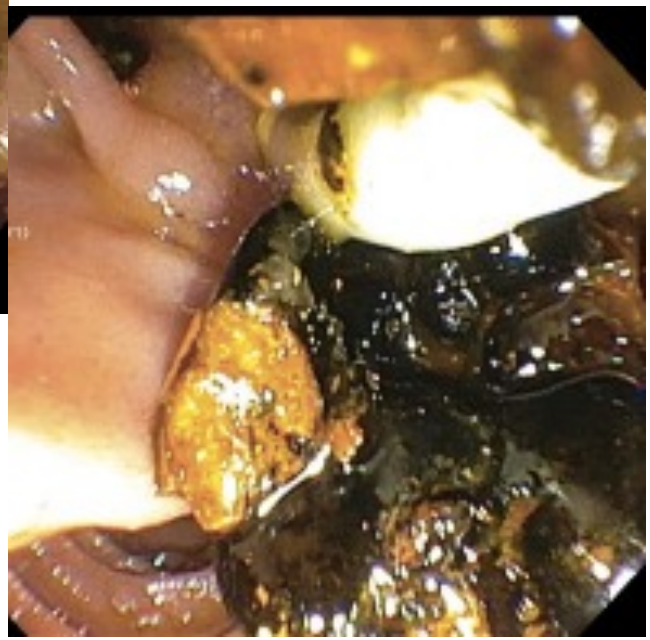




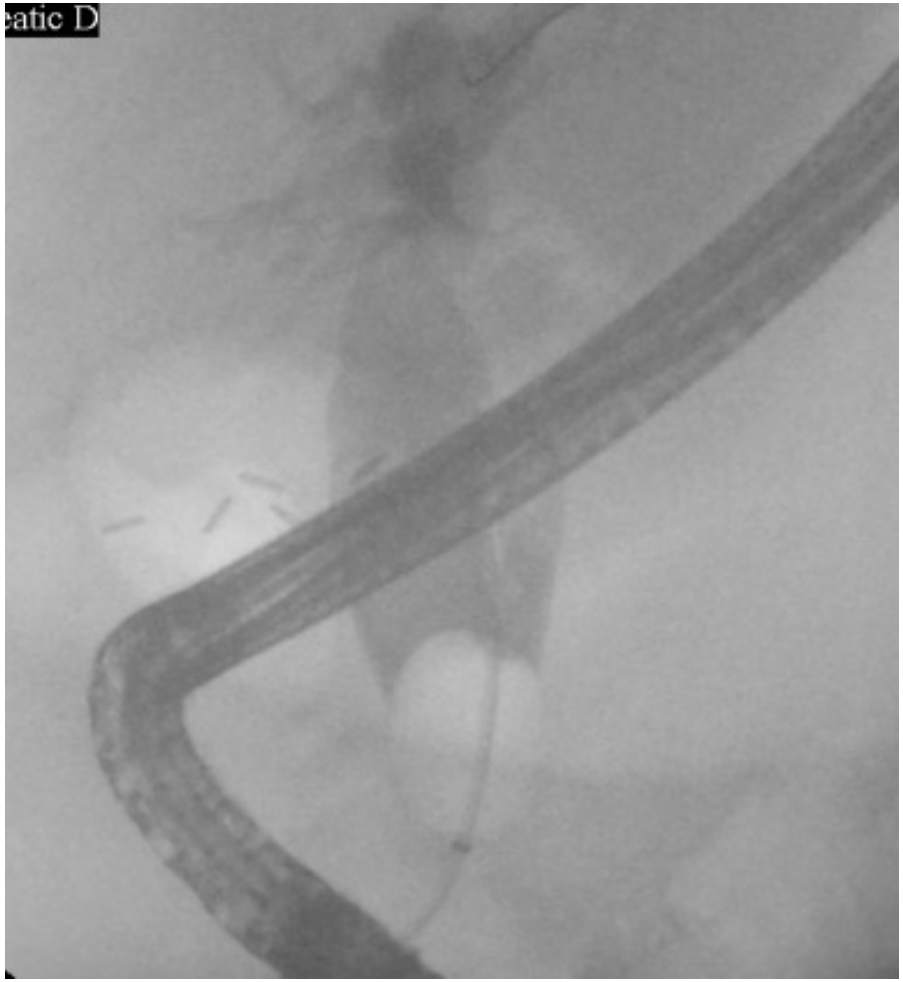
Hyun Gun Kim et al. WJG 2009 (left picture)

Case #1: Stone removal





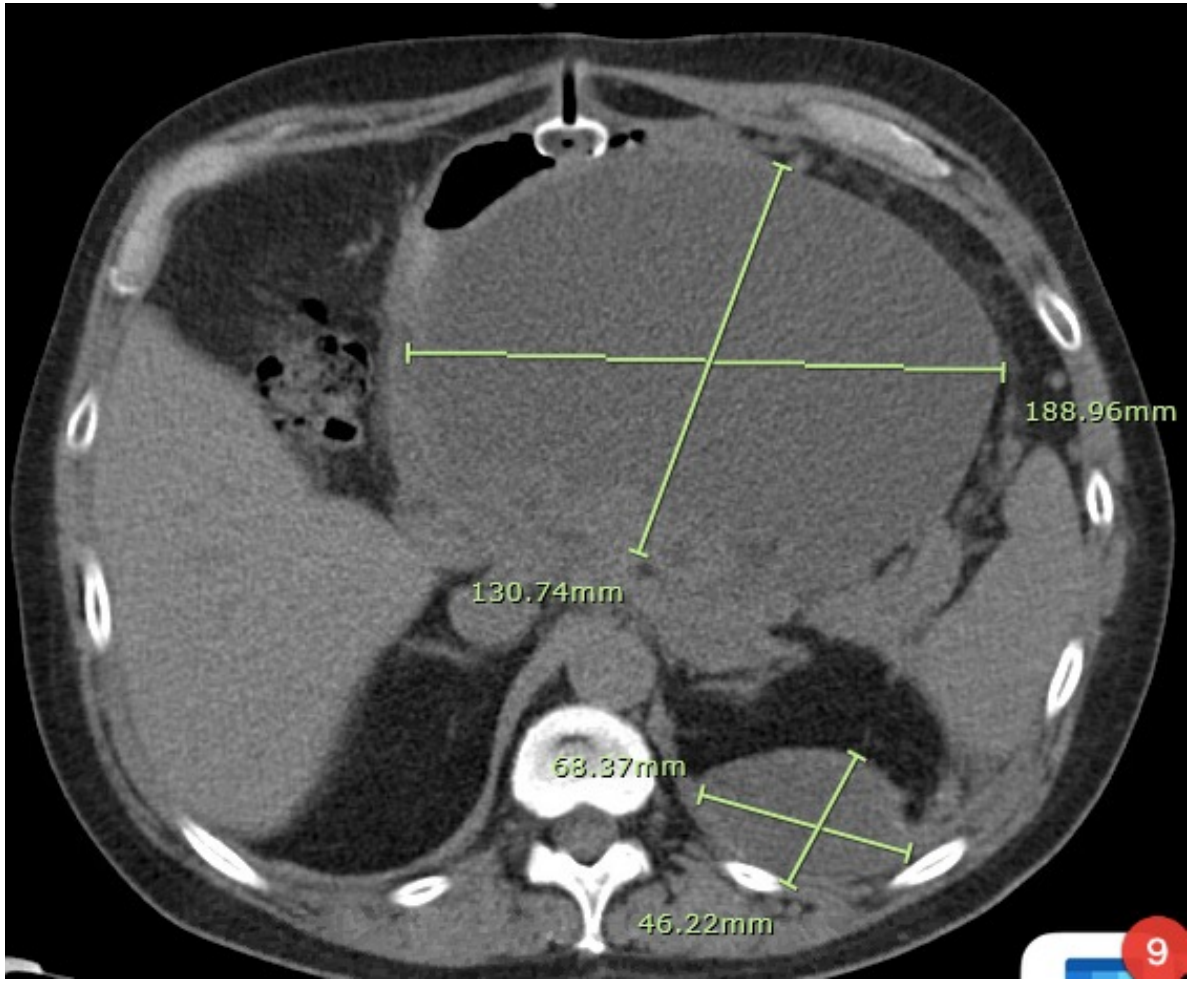
Case #1: Final cholangiogram



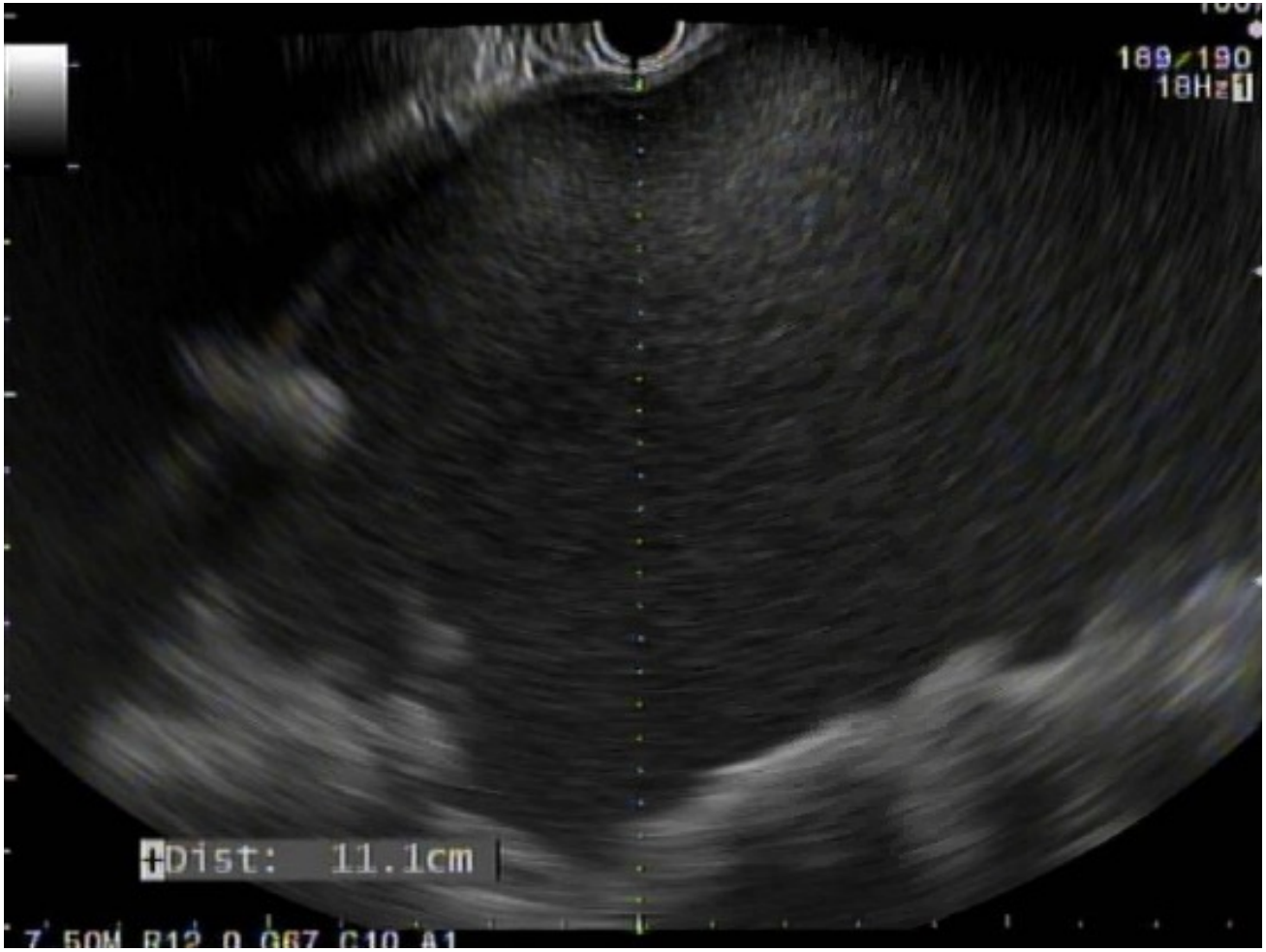
Case #2

- 56 year-old male with hx heavy ETOH and pancreatitis
- Episode of necrotizing pancreatitis with prolonged ICU stay (trach/peg), eventual d/c home
- Residual sx of abd pain, early satiety, n/v, weight loss
- Outpatient CT scan with massive pancreatic fluid collection

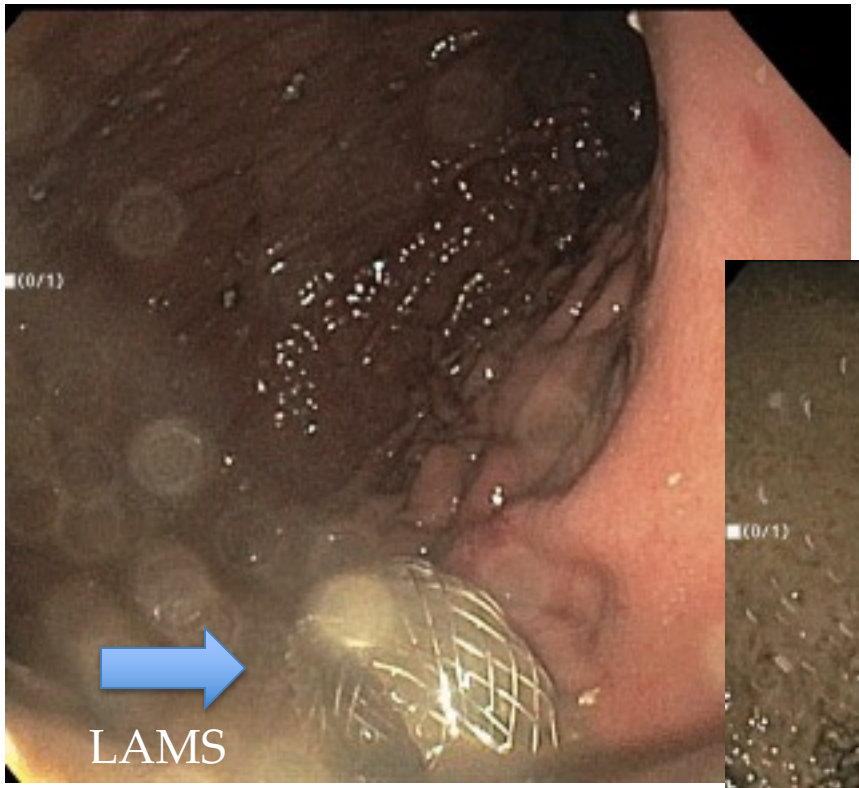
Case #2: CT imaging



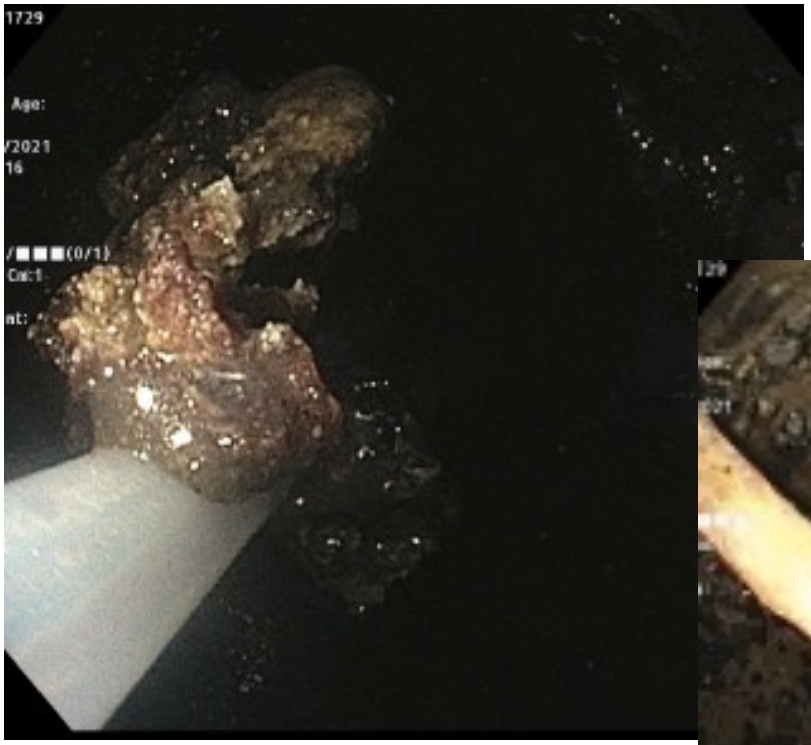
Case #2: Endoscopic ultrasound



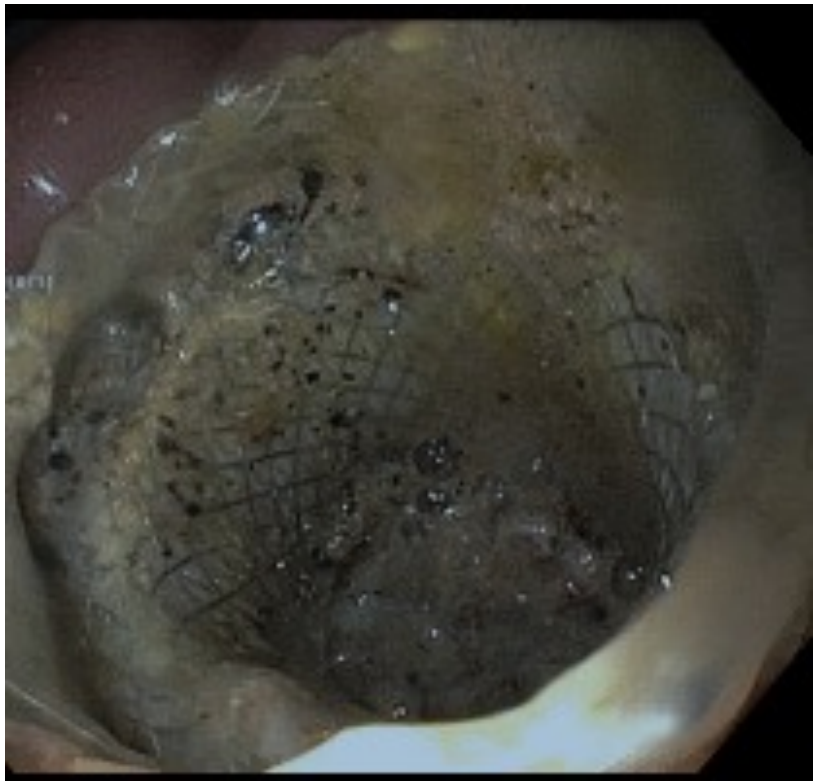
Case #2: LAMS placement



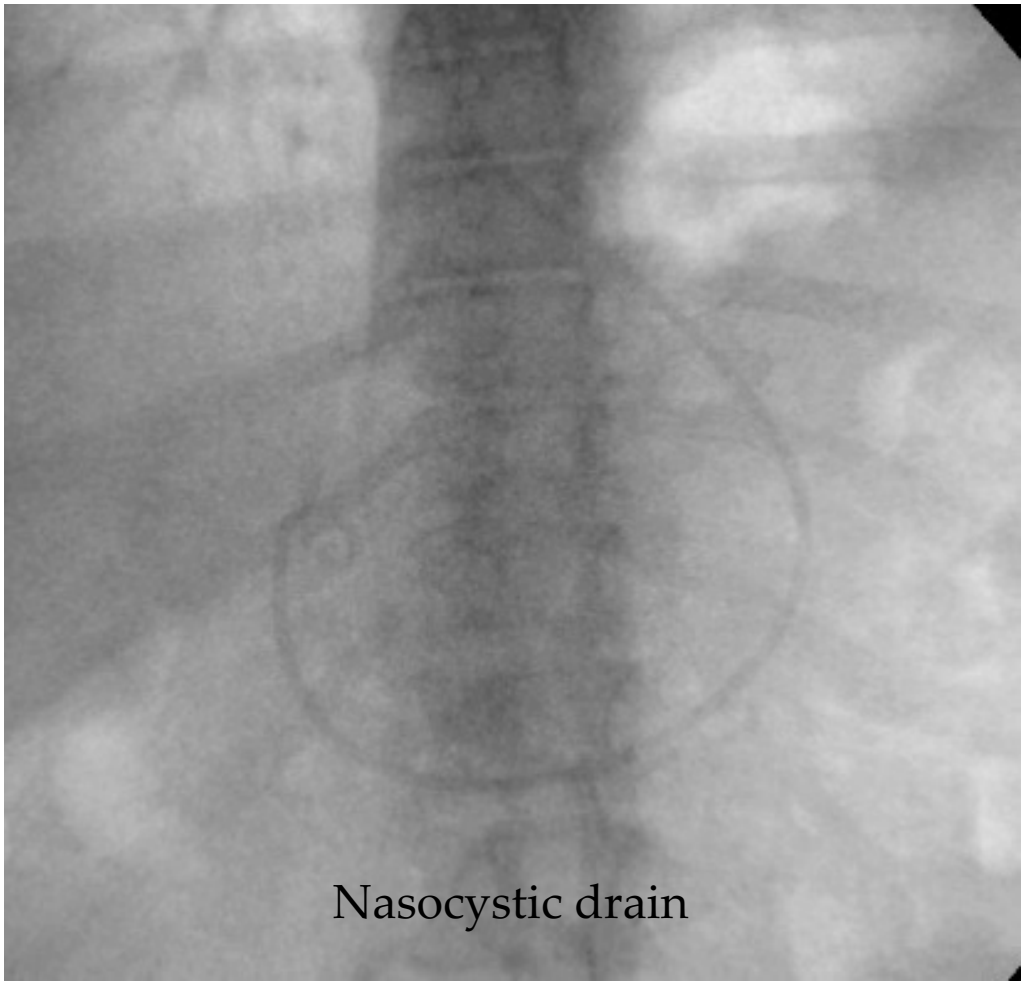
Case #2: necrosectomy



Case #2: Readmission 1 wk later

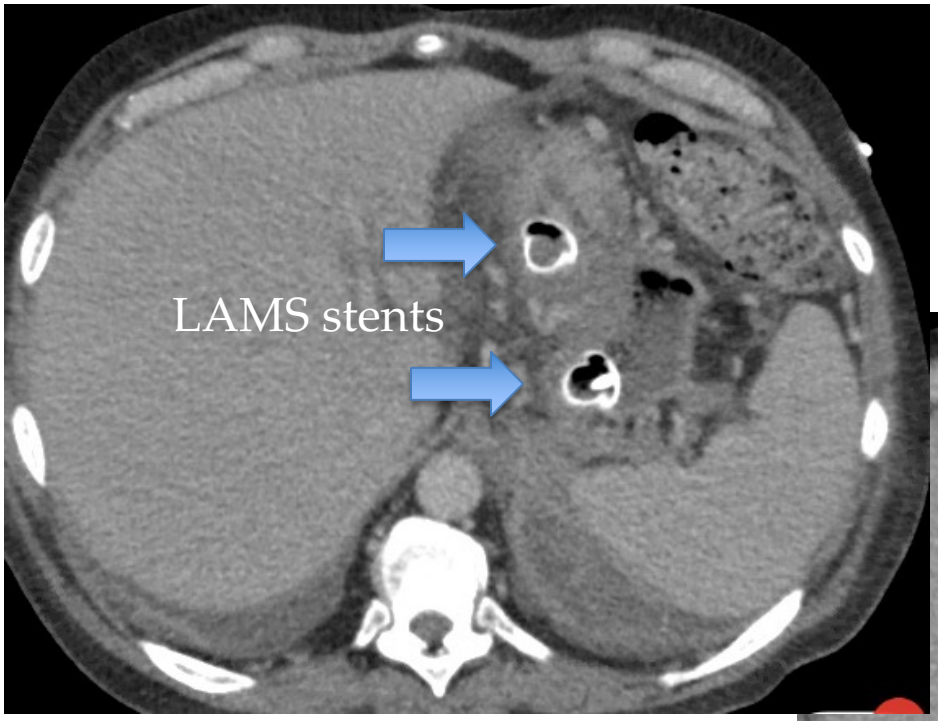


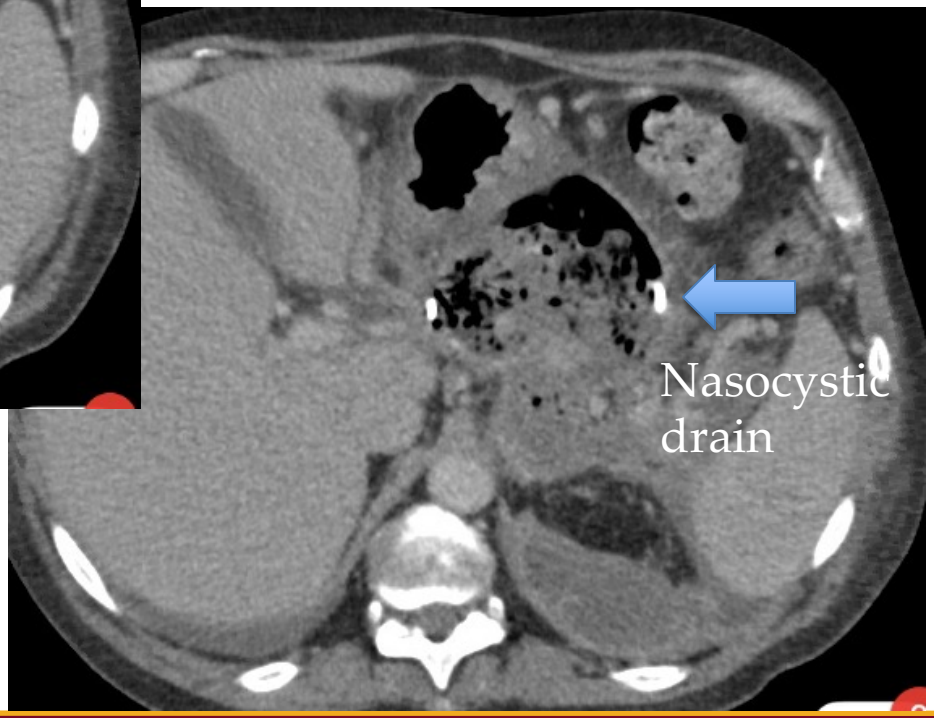
Second stent



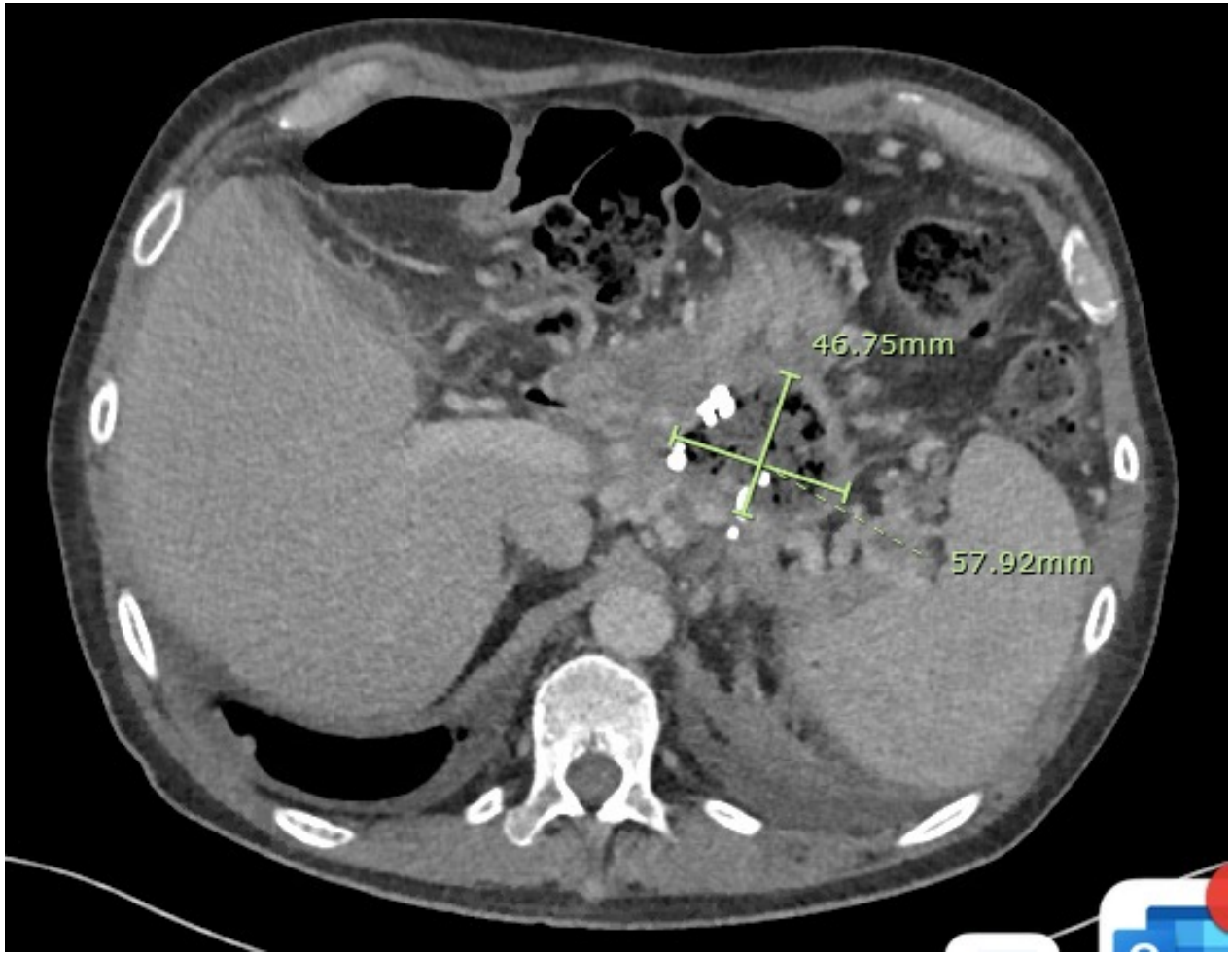
Nasocystic drain

Case #2: Readmission 1 wk later





Case #2: CT 2 months later



Walled off pancreatic necrosis

- Walled off necrosis results from necrotizing pancreatitis
- Intervention only for symptomatic patients or infection
- Intervention should be delayed at least 4 until collection is mature
- Treatment requires multidisciplinary approach (surgery, IR, GI) at center with expertise

Baron et al. Management of pancreatic necrosis. Gastroenterology 2020

Walled off pancreatic necrosis

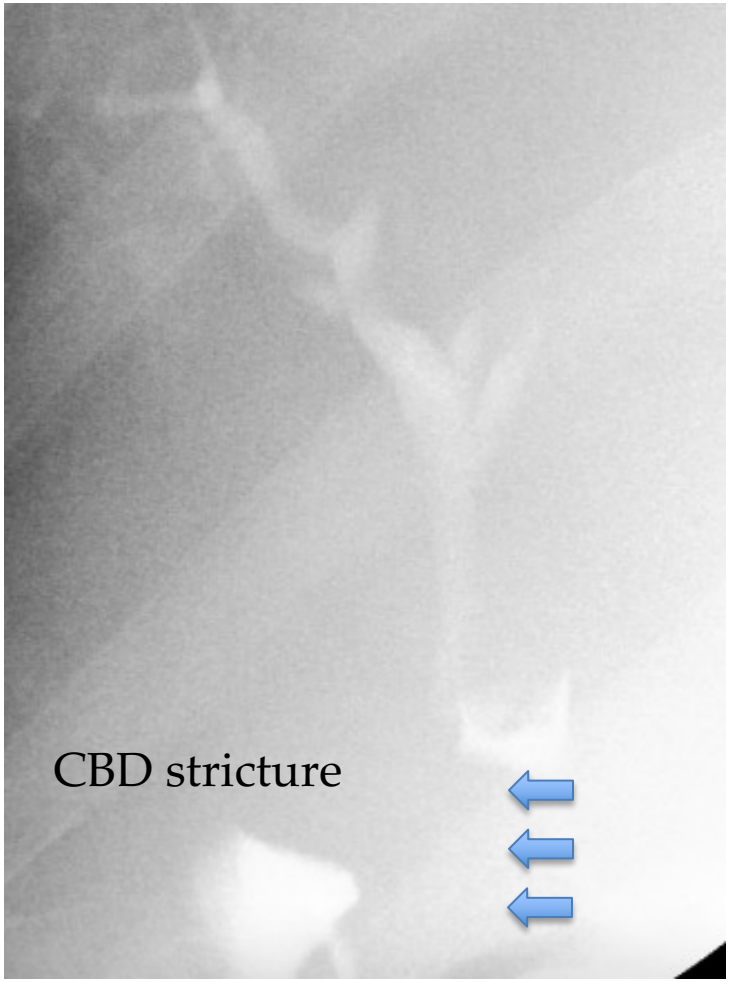
- Percutaneous drainage and endoscopic transgastric drainage are first-line approaches
- Minimally invasive surgical approaches (ie. VARD, lap transgastric) are an options when less invasive approaches are not feasible
- Step-up approach: perc drain or transgastric stent → direct endoscopic debridement → surgery

Baron et al. Management of pancreatic necrosis. Gastroenterology 2020

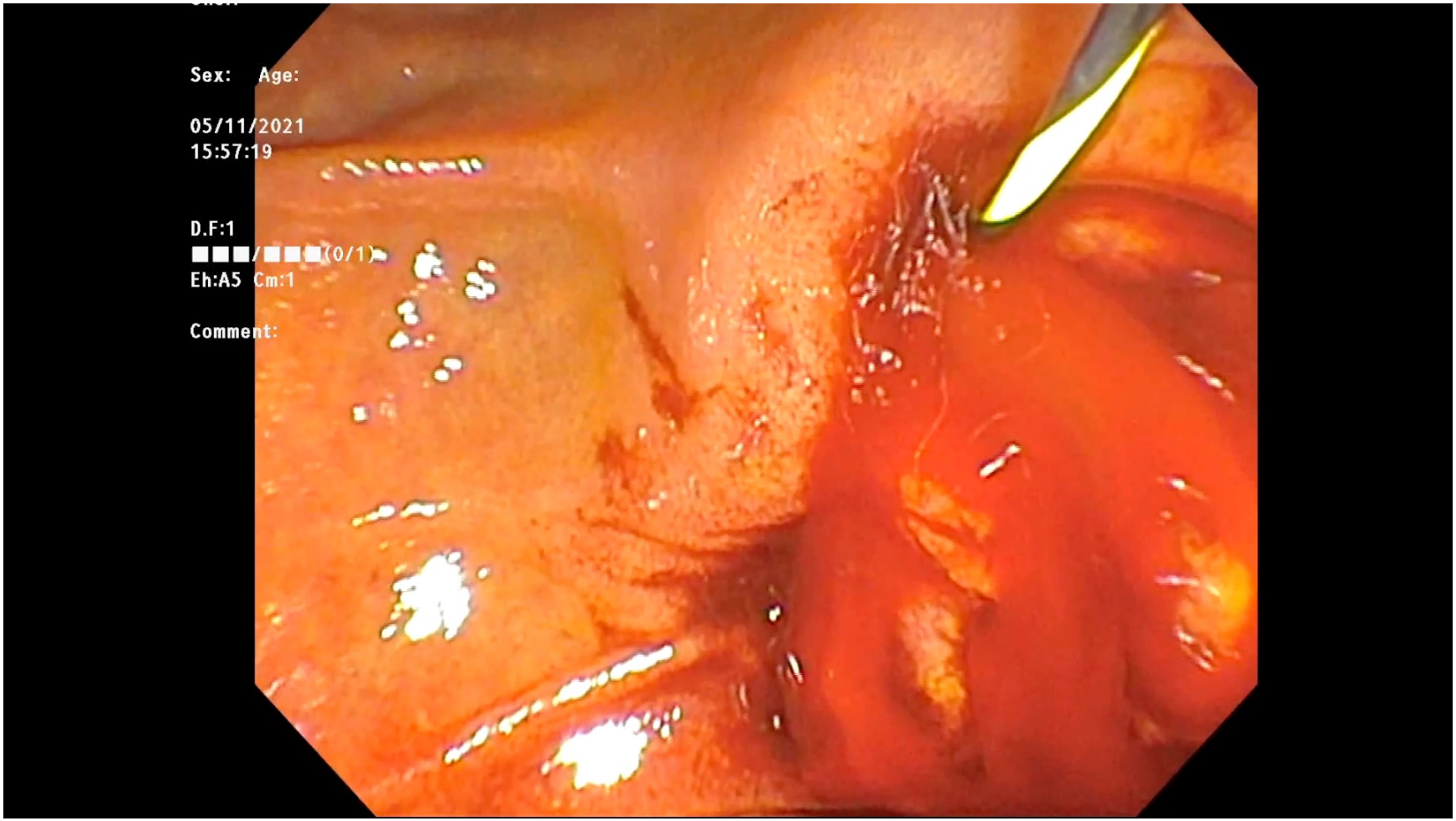
Case #3

- 54 y/o male w/ HCV cirrhosis, MELD 30
- Transferred for liver transplant evaluation
- CT scan with intrahepatic duct dilation and soft tissue thickening/mass around CBD and portal hilum.
- US: Small volume ascites, PVT
- TB 32, AP 680, AST/ALT 77/33, INR 1.3, plts 80
- Concern for pancreatic malignancy → EUS/ERCP

Case #3: Cholangiogram



Case #3: ERCP video



Post sphincterotomy bleeding

- Options
  - Epinephrine injection (temporal effect)
  - Balloon tamponade (temporal effect)
  - Clips (difficult to use with duodenoscope)
  - Cautery (risk of thermal injury/pancreatitis)
  - Stents/covered metal (migration, cholecystitis)
  - ? Hemostatic spray (temporal, more data needed
  - Combination therapy

Case #4

- 47 year-old male s/p distal pancreatectomy for gunshot wound to abdomen
- Pancreatic leak initially managed with PD stent and percutaneous drainage
- Drain output persistent > 1 liter/day
- Decision to pursue endoscopic embolization therapy with coil and cyanoacrylate glue

Case #4: Pancreatic leak video

Pancreatic leaks/fistulas

- Pancreatic leak/fistula can result from surgery, trauma, pancreatitis
- Initial management is conservative (PD stent, NPO, octreotide, perc drainage)
- If above fails, embolization of the leak with coil/glue is an option
- Surgical revision can be considered if more minimally invasive options fail

THANK YOU