

Introduction

- Percutaneous transhepatic cholangioscopy (PTCS) provides direct visualization of the biliary system.
- Direct visualization of the biliary system has advantages for the identification and treatment of intraductal lesions compared to indirect imaging of endoscopic retrograde cholangiopancreatography (ERCP).

Case

- 63 yrs. old male was admitted with 3-day history of abdominal pain associated with nausea and vomiting.
- Physical exam showed scleral icterus, jaundice and epigastric tenderness.
- Laboratory data WBC 14, AST 80, ALT 77, AP 144, TB 10.1, INR 1.0, Lipase 3000, Amylase 850, CA 19-9 673.
- MRI Abdomen with MRCP Figure 1
- ERCP revealed papillary stenosis and ventral pancreatic sphincterotomy was performed; distal CBD could not be cannulated due to severe stenosis.
- Antibiotics were started and he underwent internal/external percutaneous biliary drain placement. Subsequently patient developed necrotizing post ERCP pancreatitis with multiple intra-abdominal fluid collections requiring interval placement of surgical drains.

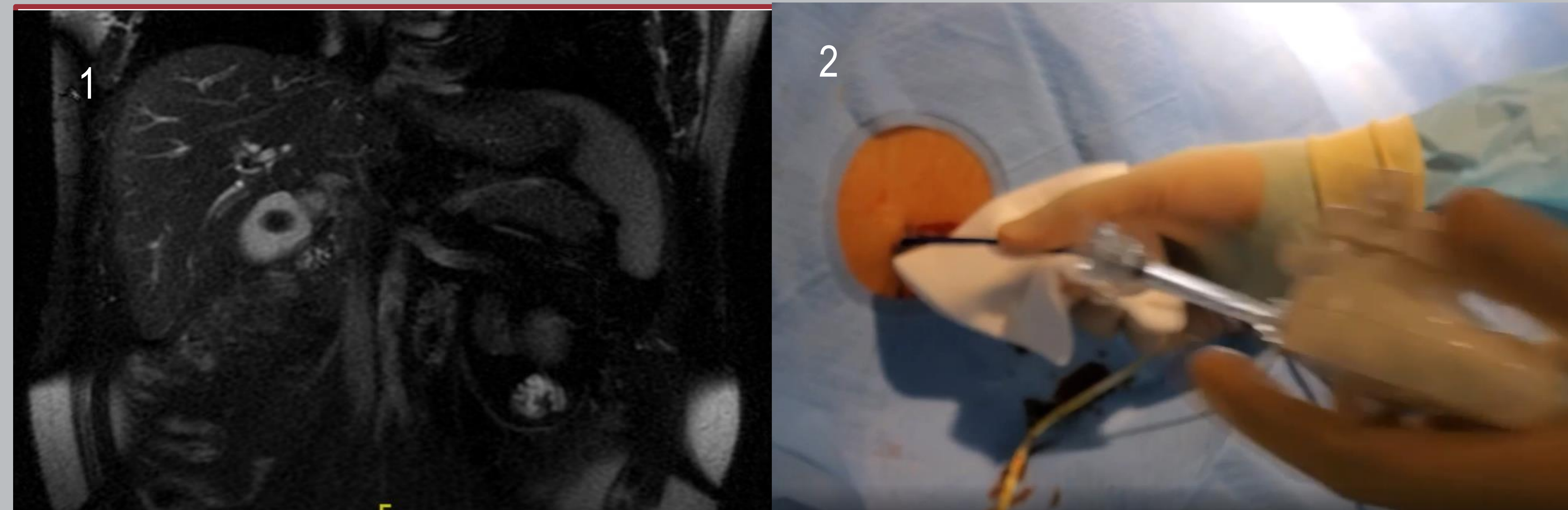


Figure 1: MRI Abdomen with MRCP with large gallstones, gallbladder neck, cystic duct, and proximal common bile duct thickening and enhancement and severe segmental narrowing of the affected proximal common bile duct resulting in moderately severe diffuse biliary dilatation proximally. **Figure 2-** Insertion of PTCS via the percutaneous transhepatic drain tract **Figure 3** Frond like mass distal to the bifurcation of common bile duct

URL-<https://youtu.be/w13qeRBHOcY>

- Repeat attempt at ERCP was not possible due to patient clinical condition and family refusal.
- To obtain a definitive diagnosis, decision was made to access the biliary tree via PTCS (Figure 2 and 3). Biopsies from the mass revealed atypical cells concerning for malignancy.

Discussion

- Cholangiocarcinoma is a very aggressive tumor
- Diagnosis can be challenging due to location of tumors.
- Tissue collection during endoscopic (ERCP) and/or percutaneous transhepatic (PTC) procedures provides with definitive diagnosis.
- In patients with difficult bile duct access PTCS approaches offers an alternative for bile duct access. Studies have demonstrated greater than 95% accuracy with PTCS in diagnosing biliary malignancies.
- Severe complications from PTCS occur in < 8% of patients.
- This case highlights a challenging diagnostic case where novel and underutilized PTCS technique provided with diagnosis.