

Worth S¹; Millard J²; Jacobs D², Jones W³

¹University of South Carolina School of Medicine Greenville, Greenville SC; ²Department of Surgery, Prisma Health Upstate, Greenville SC; ³Department of Surgery, GI Oncology, Prisma Health Upstate, Greenville SC

BACKGROUND

- Normally, the common hepatic duct joins the cystic to form the common bile duct. The common bile duct enters the head of the pancreas, joining the main pancreatic duct to form the ampulla of Vater at the major duodenal papilla.
- Anomalous anatomy involves the junction of the bile duct and pancreatic duct outside the duodenal wall with a long common ductal channel leading to the duodenal lumen.
- Rare congenital anomaly
- Present in 50-80% patients with biliary cysts
- Increased for choledochal cysts and malignancy

OUR CASE

- 27-year-old female
- Acute onset severe epigastric abdominal pain and nausea
- Denies clay-colored stools, dark urine, pruritis, jaundice
- Laboratory studies unremarkable but noted dilated common bile duct on ultrasound
- Underwent laparoscopic cholecystectomy with intraoperative cholangiogram and subsequent ERCP secondary to cholangiogram findings

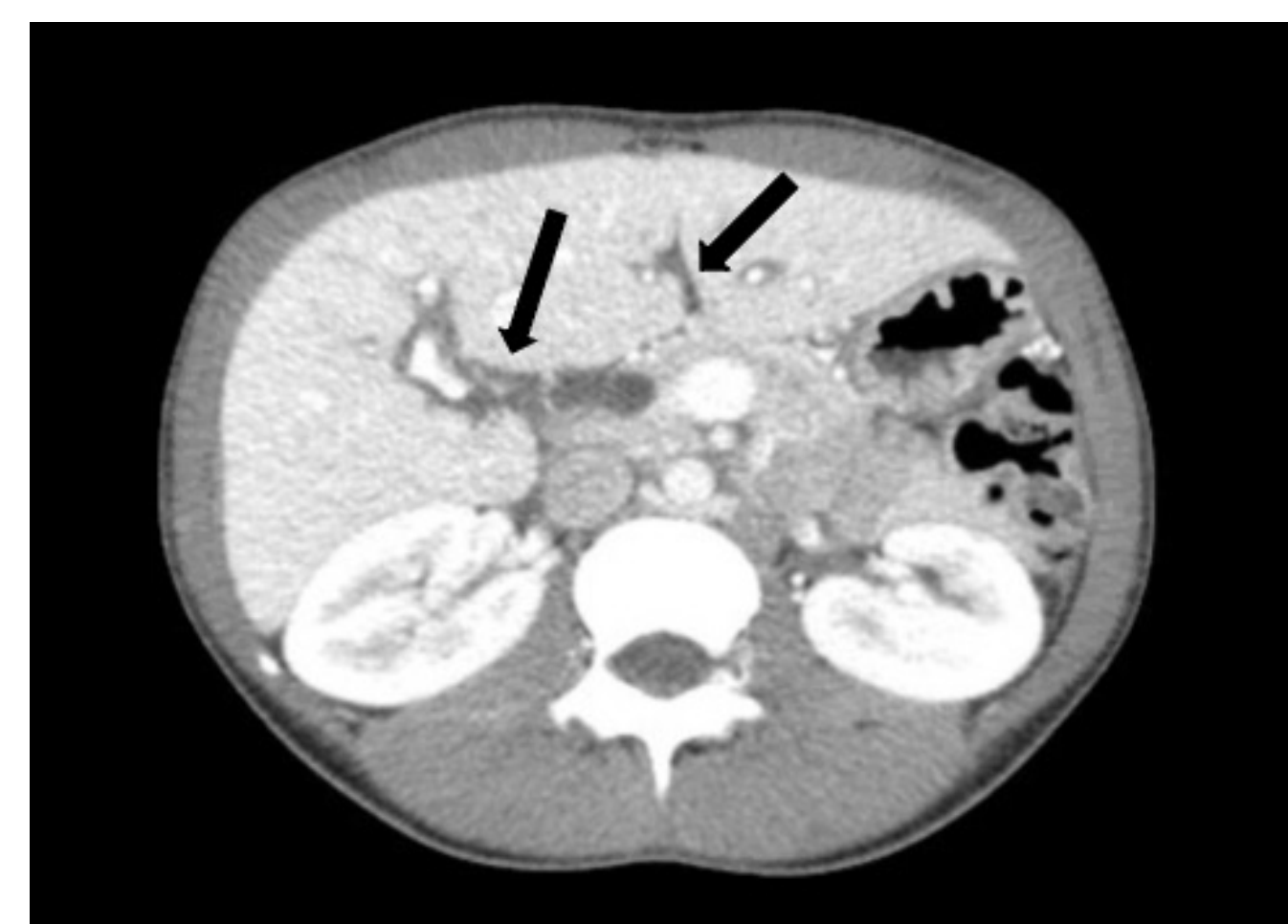


Figure 1. CT Abdomen/Pelvis demonstrating intrahepatic and extrahepatic biliary ductal dilation with possible stones within the distal common bile duct

IMAGING

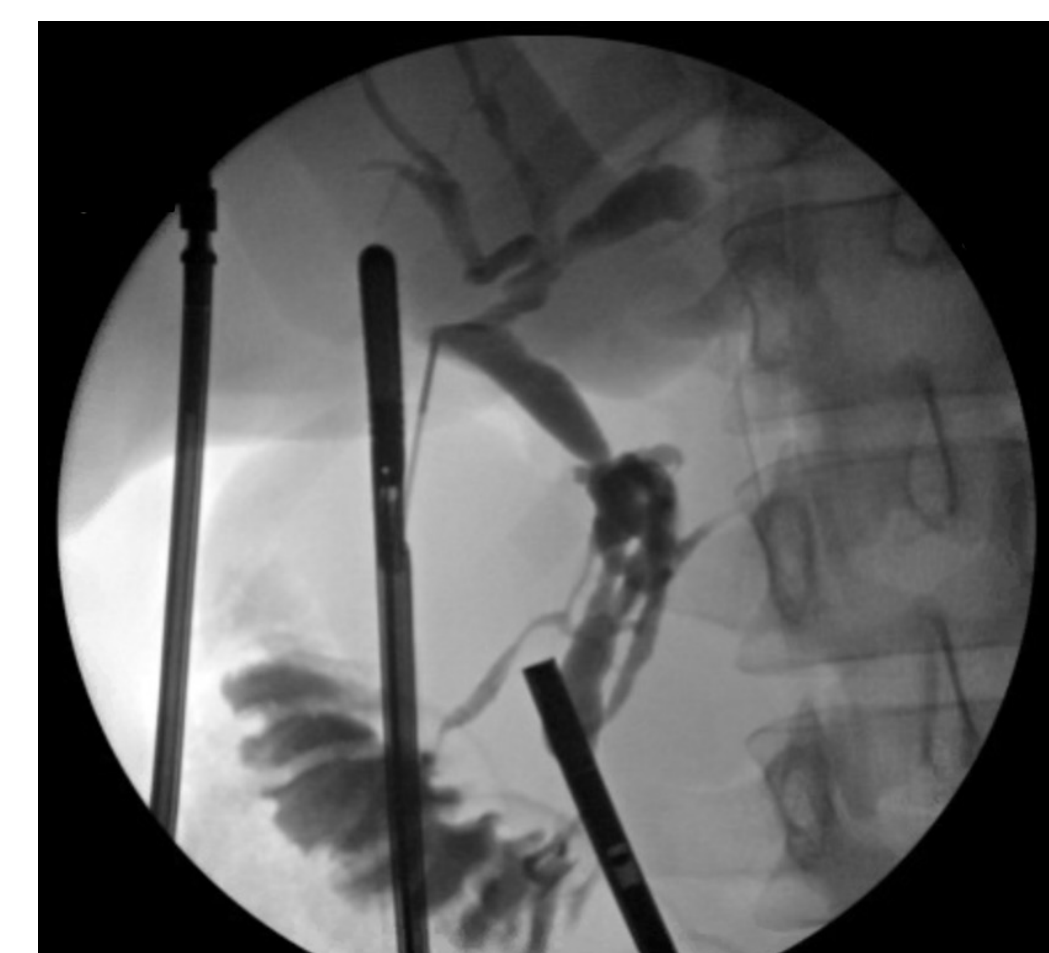


Figure 2. Abnormal intraoperative cholangiogram demonstrating very short cystic duct with multiple ductal abnormalities in the distal common bile duct, likely choledochal cyst with abnormal pancreatic duct anatomy

IMAGING (CONTINUED)

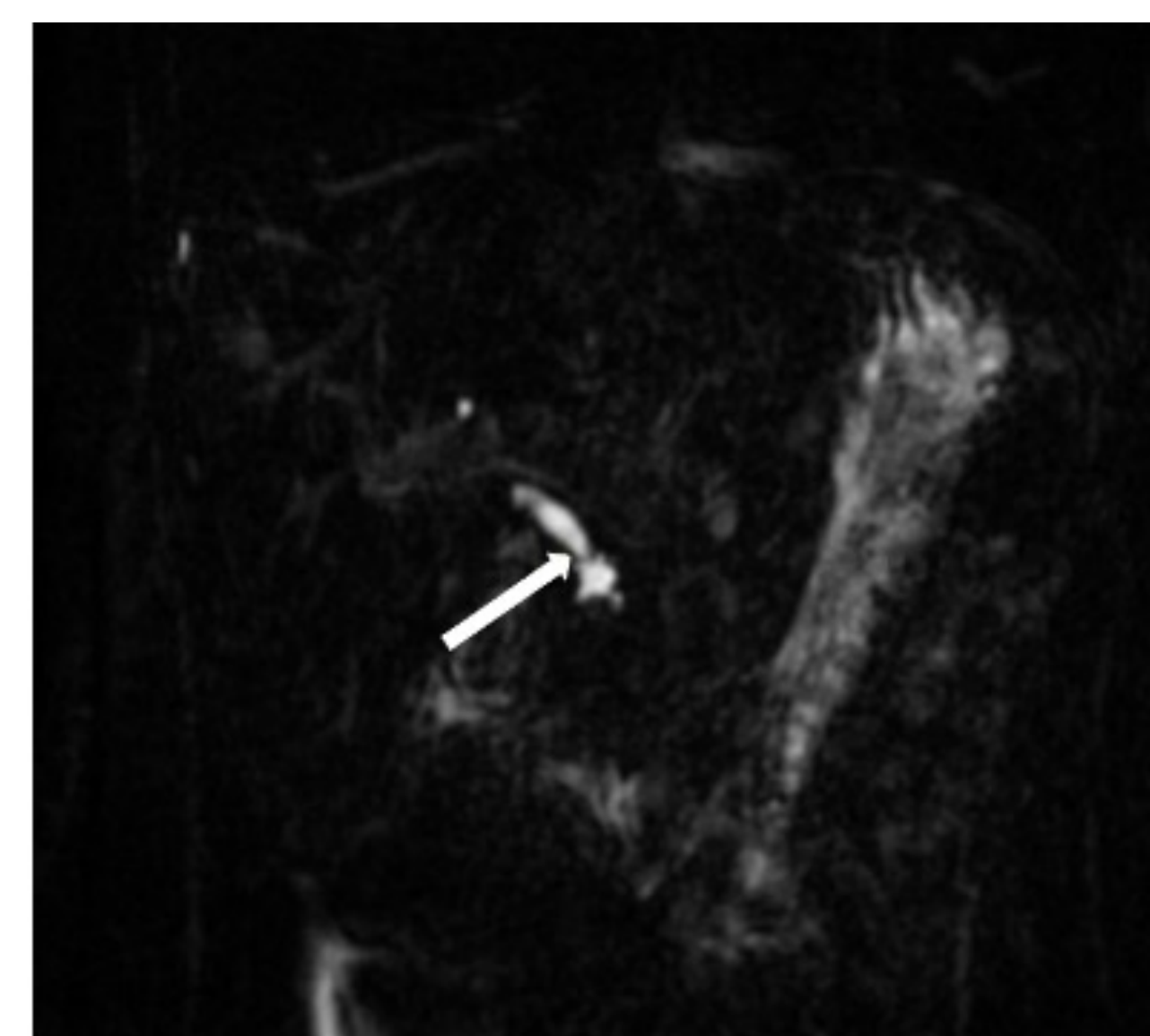


Figure 3. Magnetic Resonance Cholangiopancreatography demonstrating abnormal pancreaticobiliary system anatomy with suspected complex anomalous pancreaticobiliary junction and cystic 16 x 10 mm lesion in the region of the pancreatic head which appears contiguous with the common bile duct and potentially the main pancreatic duct. Moderate intrahepatic ductal dilation with multiple short segment strictures concerning for primary sclerosing cholangitis

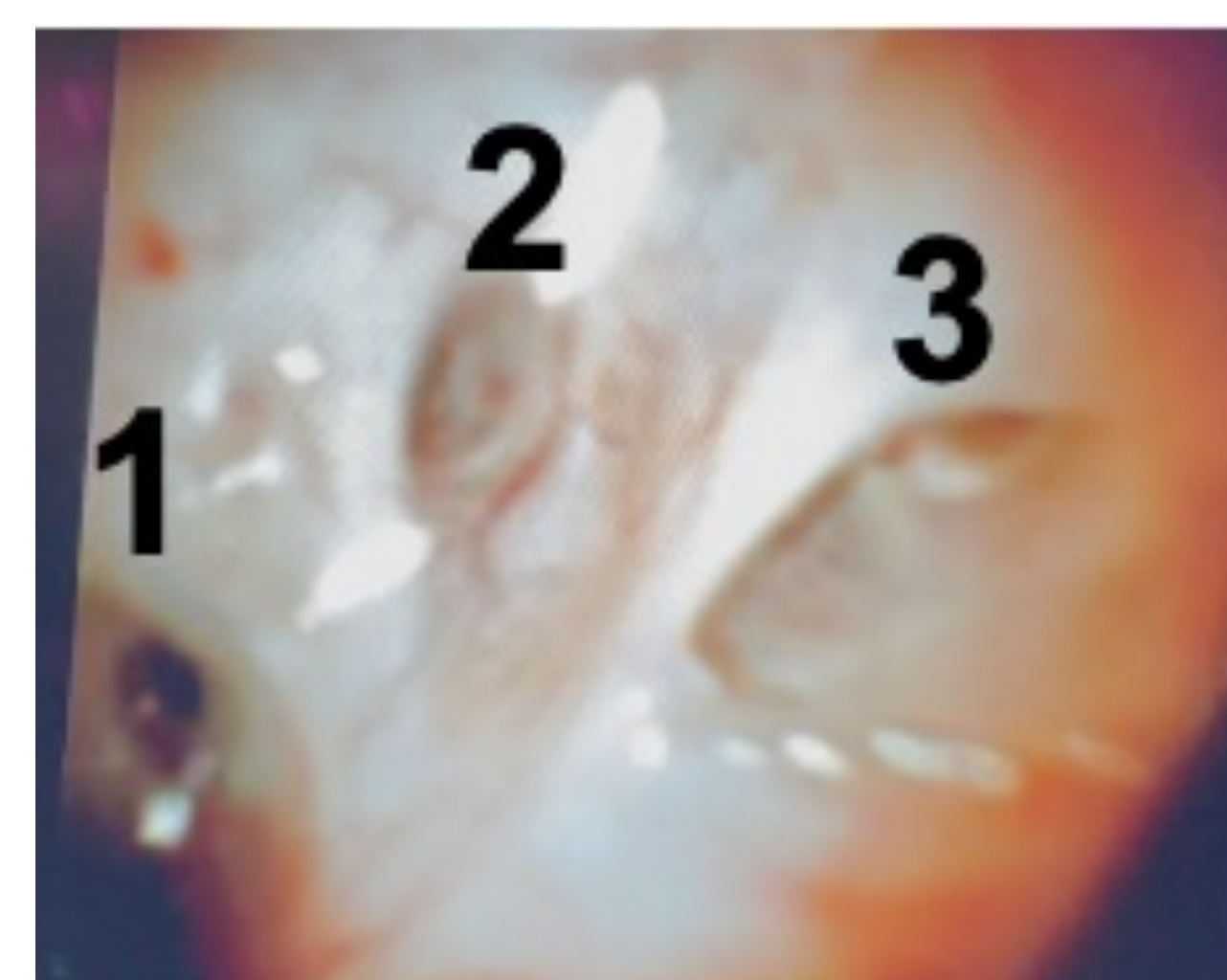


Figure 4. Endoscopic Retrograde Cholangiopancreatography demonstrating normal-appearing biliary and pancreatic mucosa with at least three tributaries directly from the pancreas into the bile duct at various levels



Figure 5. Fluoroscopy showing tributary 1 into common bile duct (white arrow)

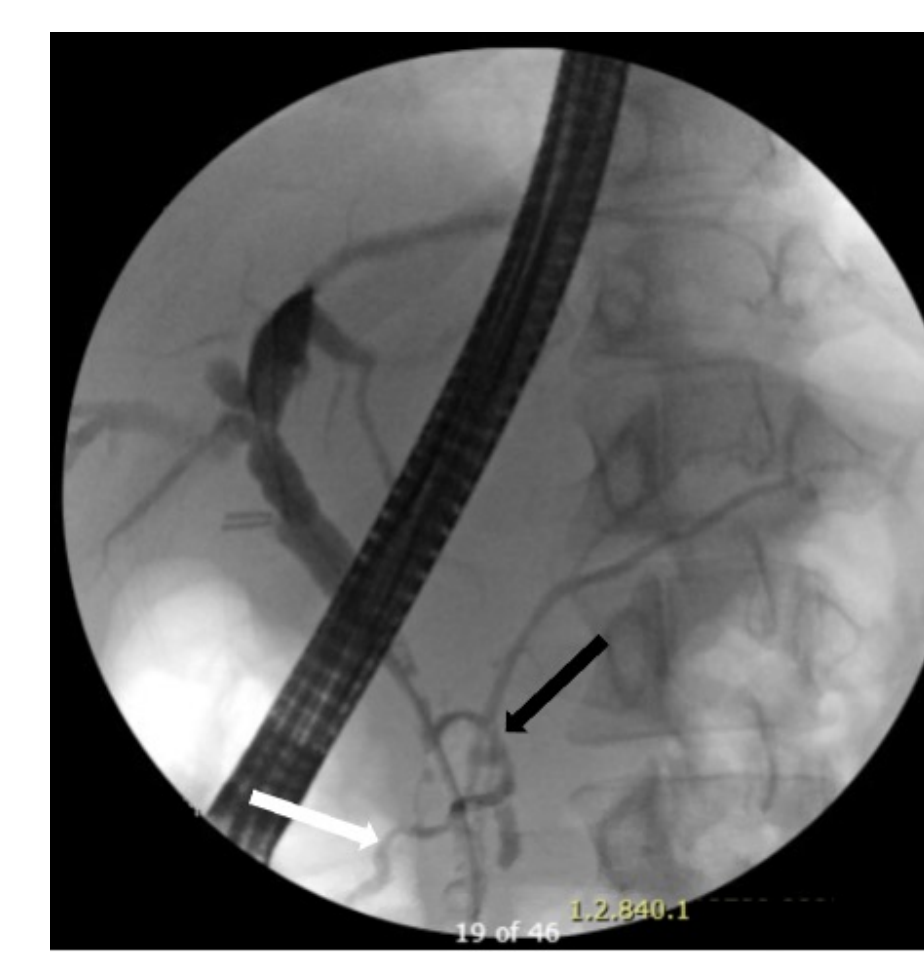


Figure 6. Fluoroscopy showing pancreatic duct with ansa orientation (black arrow) and tributary 2 entering duct of Santorini (white arrow)

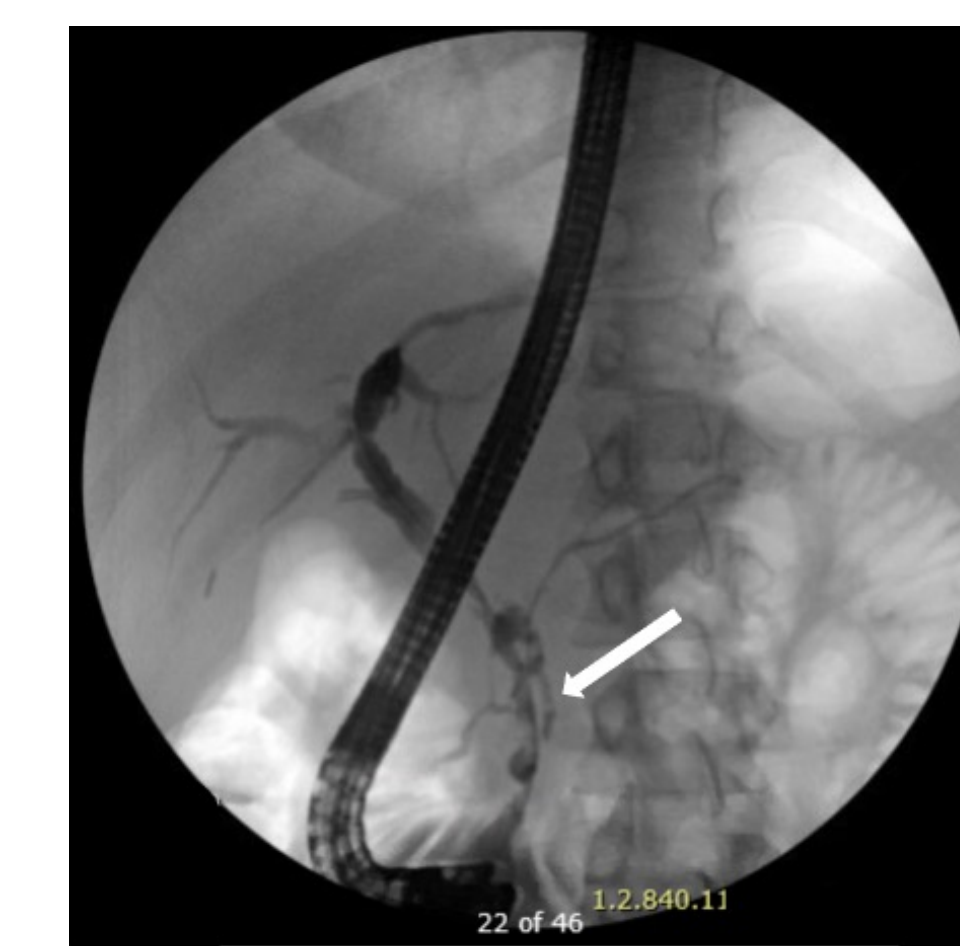


Figure 7. Fluoroscopy showing tributary 3 entering duct of Wirsung (white arrow)



Figure 8. Biliary and pancreatic confluence (white arrow)

PATIENT'S PROPOSED VARIANT

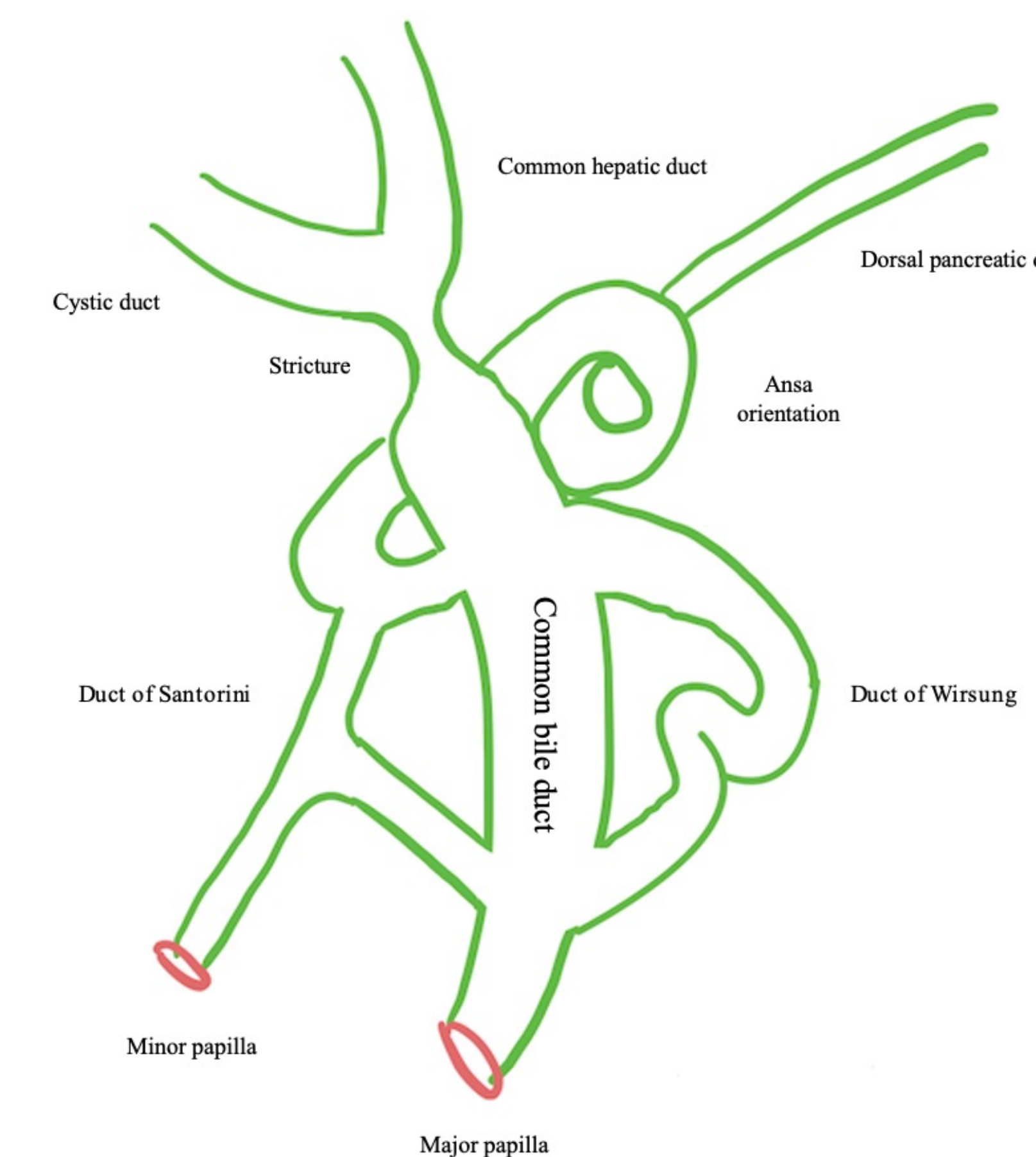


Figure 9. Patient's unusual variant of anomalous pancreaticobiliary junction

PATHOLOGY

Common Bile Duct

- Few scattered benign appearing ductal cells present. The cell block is composed predominantly of fibrous tissue with rare benign glands

PLAN

- Survey with annual MRCP and MRI to assess for any findings concerning for neoplasm given this anomalous union

REFERENCES

