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Pancreatoscopy In Undiagnosed Pancreatic Disease

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INTRODUCTION

- Pancreatic pathology encompasses a broad differential and requires a multitude of diagnostic studies to accurately diagnose a specific condition.
- ERCP has been proven to be extremely helpful in the diagnosis and treatment of pancreatic ductal disease.
- However in the event of conflicting data between pancreatography and non-invasive imaging, direct ductal visualization with pancreatoscopy should be considered.
- Previous literature has described a unique role of pancreatoscopy in the event of discrepancies noted on ERCP and CT imaging¹.
- We demonstrate a unique case in which a patient who had been diagnosed with a pancreatic stricture via ERCP was ultimately found to have stone disease discovered using pancreatoscopy.

CASE BACKGROUND

- A 72-year-old female with no significant medical history presented with radiating abdominal pain to her back with nausea and vomiting.
- Laboratory evaluation noted an elevated lipase of 6,570U/L with normal LFTs. All other basic labs were unremarkable.
- A contrast-enhanced abdominal CT study reported a 5mm mid-pancreatic duct (PD) stone causing acute distal pancreatitis (Figure 1). No gallstones or biliary dilation was noted which was confirmed via abdominal ultrasound.
- Unfortunately she failed conservative management and subsequently underwent endoscopic intervention with an ERCP. Pancreatogram revealed a stricture within the mid-PD without evidence of a stone (Figure 2). An internal flanged – external pigtail stent spanning the stricture was placed. Afterwards her symptoms gradually improved.

CASE PRESENTATION

- Approximately 4 weeks later, repeat endoscopic evaluation was performed to evaluate for an underlying malignant pathology.
- EUS did not reveal any parenchymal pancreatic disease. Her stent was subsequently removed.
- A pancreatoscopy was then performed which discovered an obstructing stone within the mid-PD (Figure 3).
- Due to its size, balloon catheter was unable to be passed, thus the stone was fragmented using electrohydraulic lithotripsy (EHL) and the PD was then swept clean using a balloon catheter.
- A stent was replaced and ultimately successfully was removed 8 weeks later.

DISCUSSION

- Within the realm of pancreatic medicine, there are multiple investigate modalities which can be utilized to diagnose and often treat pancreatic pathology.
- With recent advances in biomedical technology, pancreatoscopy is a rather new and advanced method of diagnosing pancreatic ductal disease.
- It's vast use has been well demonstrated in the literature with regards to PD stone disease, strictures, chronic pancreatitis, and neoplastic investigation.¹⁻³
- When faced with conflicting evidence between pancreatic imaging modalities, performing a pancreatoscopy is a great diagnostic tool which may assist with the management of patients with undiagnosed disease.



Figure 1. Transverse plane of a contrast-enhanced CT of the abdomen and pelvis noting a 5mm pancreatic duct stone with evidence of distal pancreatitis.

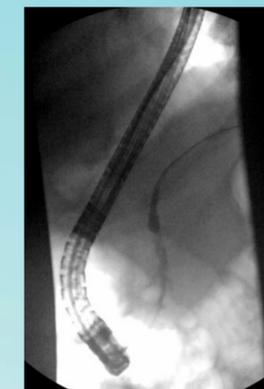


Figure 2. Pancreatogram revealing a stricture within the mid-pancreatic duct. No filling defects are noted.



Figure 3. Pancreatoscopy noting an obstructing mid-pancreatic duct stone.

REFERENCES

¹Adler, Douglas G. Pancreatoscopy for pancreatic duct stones. *Gastrointestinal Endosc.* 2014 Feb;79(4):208

²El Hajj II, Brauer BC, Wani S, Fukami N, Attwell AR, Shah RJ. Role of per-oral pancreatoscopy in the evaluation of suspected pancreatic duct neoplasia: a 13-year U.S. single-center experience. *Gastrointest Endosc.* 2017 Apr;85(4):737-745

³Miller CS1, Chen YI. Current role of endoscopic pancreatoscopy. *Curr Opin Gastroenterol.* 2018 Sep;34(5):309-315