Case Presentation

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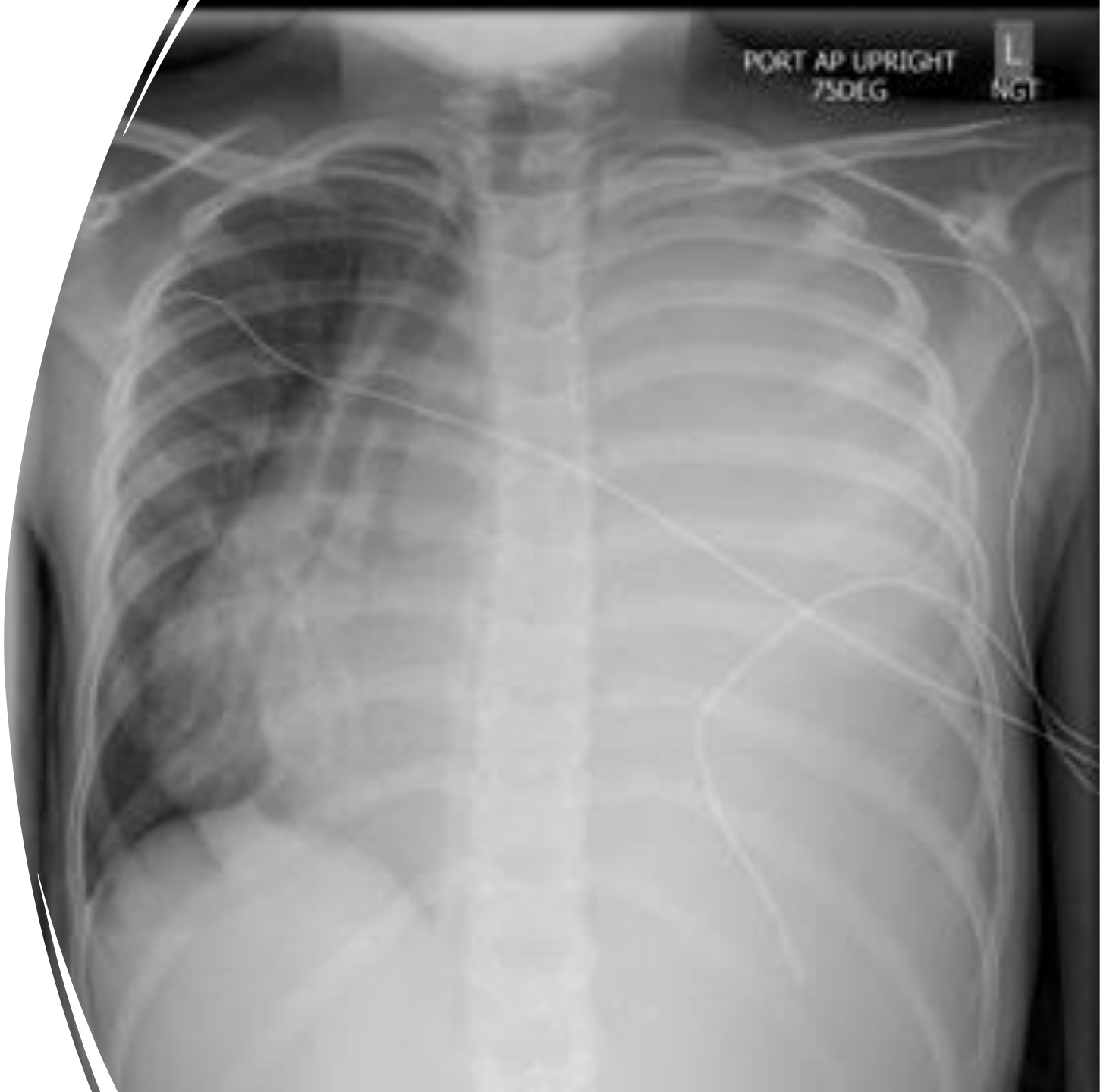
Stanford Interventional Endoscopy

Presentation

- 9 yo female with history of recurrent pancreatitis (heterozygous PRSS1) presented to ER for progressive dyspnea over 2 weeks
- She had also developed tachycardia, cough, and easy fatigue.
- CXR demonstrated complete opacification of the left hemithorax with rightward mediastinal shift.



Initial labs

There was no leukocytosis and CRP was mildly elevated

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Serum amylase and lipase were noted to be elevated at 289 U/L and 378 U/L, respectively.

Initial Management

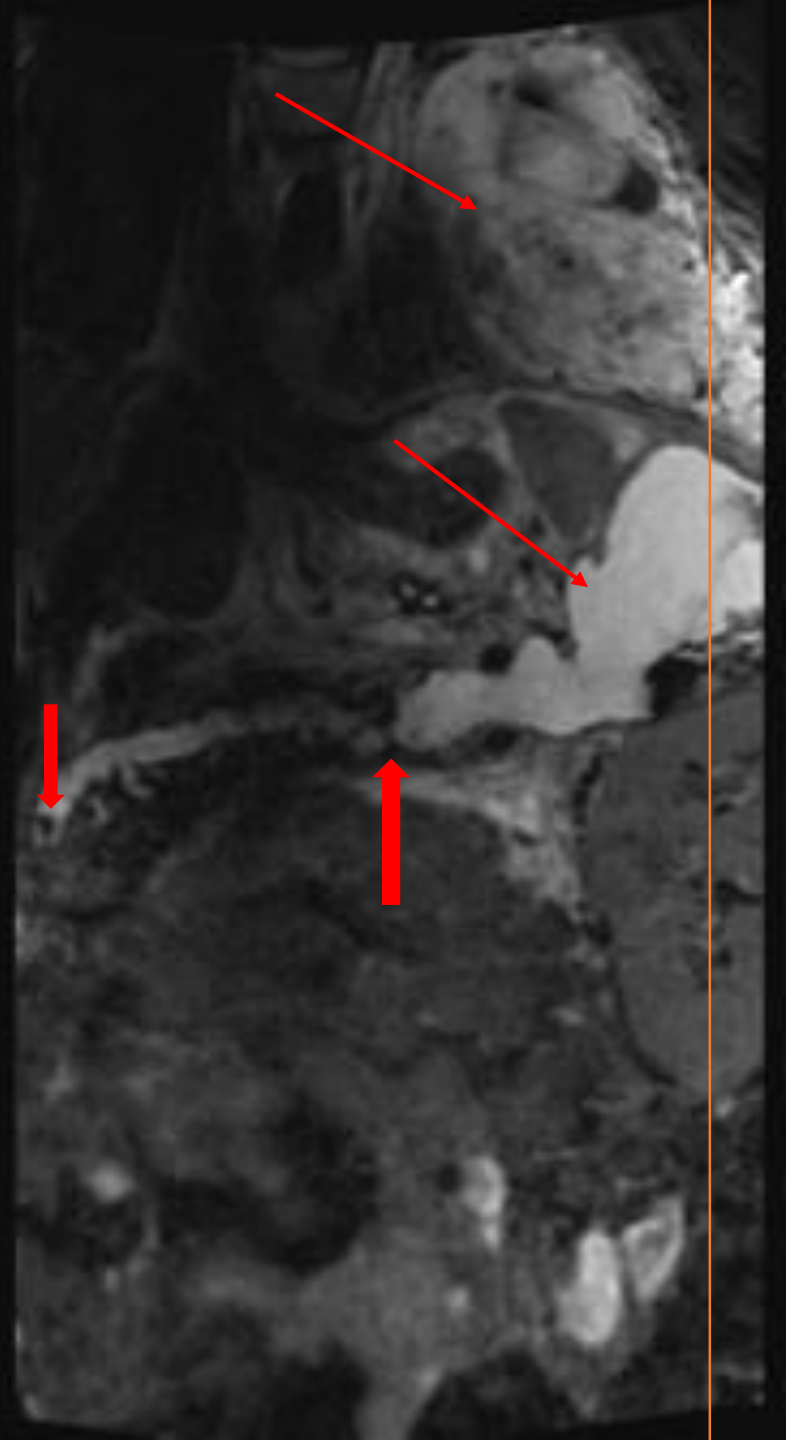
She was started on HFNC and a chest tube was placed with resultant 2.5L of serosanguinous drainage.

Pleural fluid was consistent with pancreatic fluid collection: amylase > 2000 U/L, lipase >565 U/L .

MRCP identified a markedly dilated and irregular pancreatic duct with direct communication to a complex peripancreatic collection the left upper quadrant.

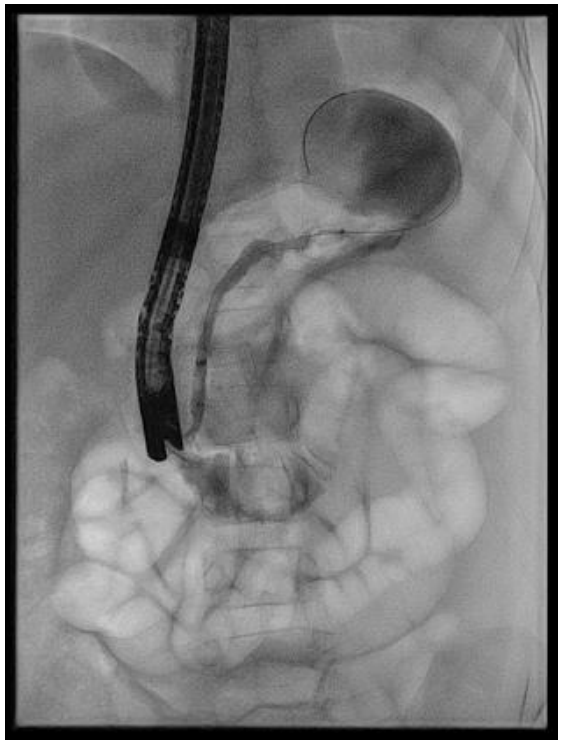
MRCP

Coronal.MRCP curved-planar reformat of the pancreas shows a markedly dilated and irregular pancreatic duct with direct communication to a complex peripancreatic collection in the left upper quadrant. A filling defect in the pancreatic duct at the head is also seen.



Initial ERCP

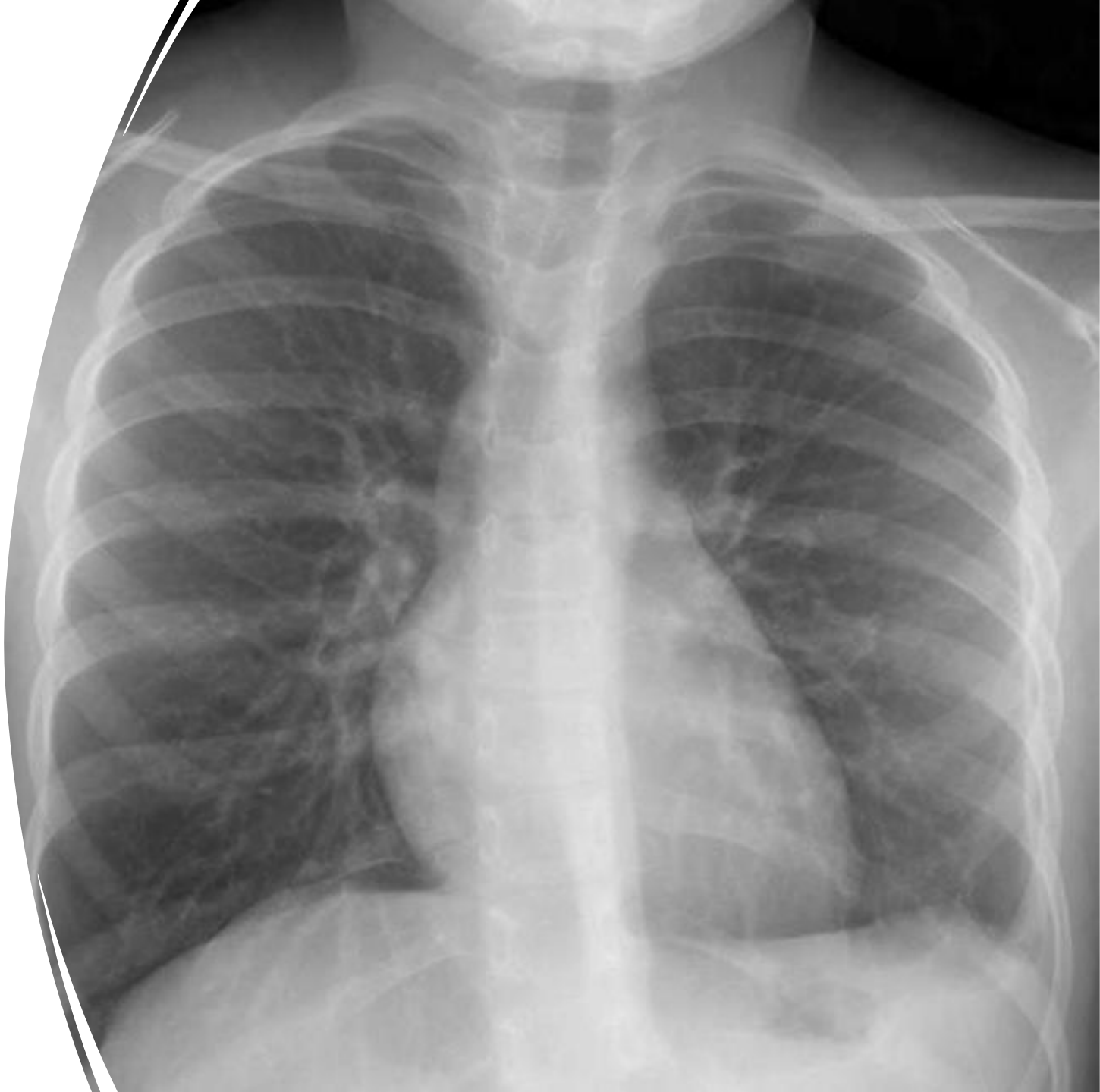
- ERCP identified an irregular and dilated pancreatic duct with contrast spilling into collection in LUQ.
- Pancreatic duct stones were removed, and a plastic pancreatic stent 7 Fr x 9 cm stent was placed.
- Chest tube was subsequently removed



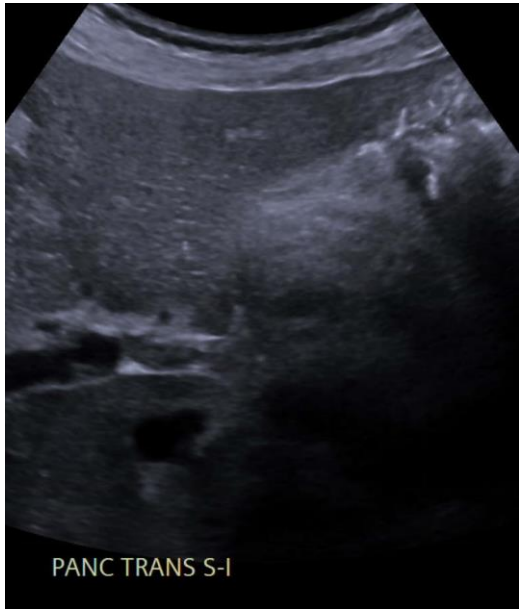
Frontal static image obtained during ERCP shows contrast opacifying an irregular and dilated pancreatic duct. Contrast can be seen spilling into the collection in the left upper quadrant

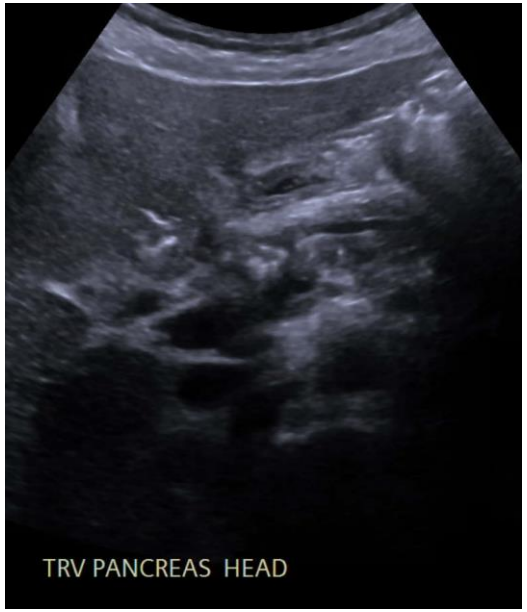
2-month Follow-up

- Resolution of abdominal pain
- Eating well, increased appetite, gaining weight
- Resolution of respiratory symptoms
- CXR improved, with residual minimal left pleural effusion

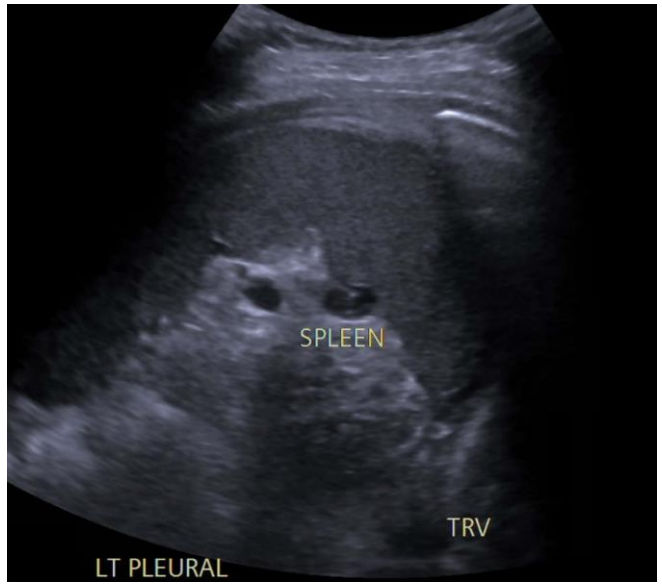


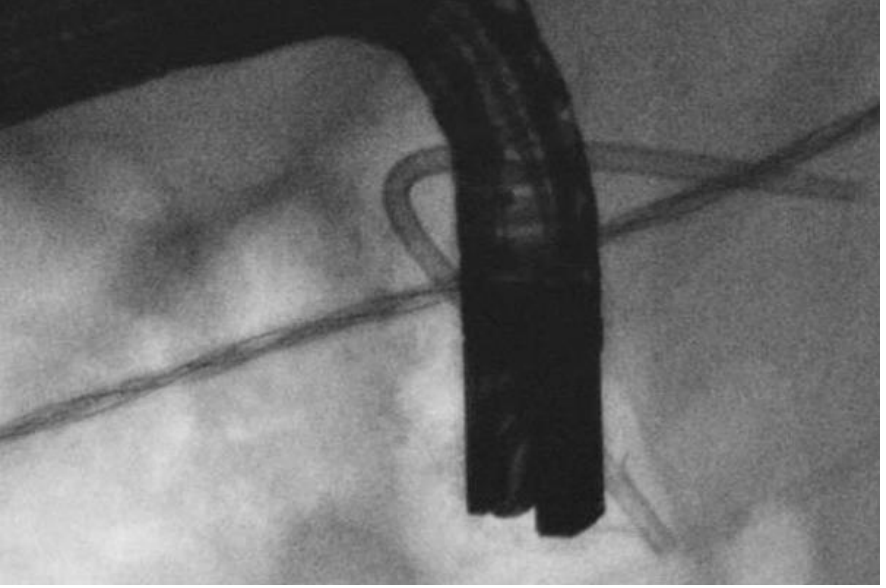
2.5 Month Follow-up

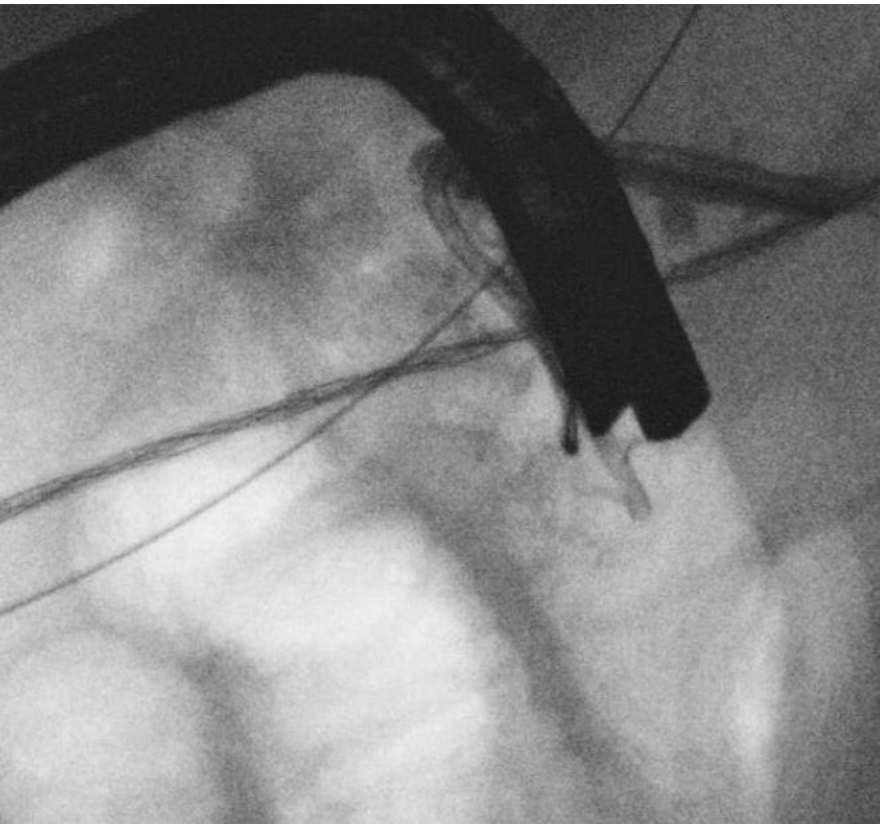




- Abdominal ultrasound
  - Sequelae of chronic pancreatitis with multiple parenchymal calcifications. 7 mm intraductal stone at the level of the pancreatic head, with diffuse pancreatic duct dilatation up to 5 mm. Stent is visualized within the pancreatic duct.
  - Interval improvement of fluid collection, with residual small volume loculated fluid in the splenorenal space adjacent to the pancreatic tail.
  - Small left pleural effusion.







Repeat ERCP
(11 weeks after initial ERCP)

- Previously placed pancreatic duct stent visualized at ampulla.
- Pancreatic duct irregular and dilated in body/tail region, with stricture evident in region of pancreatic head, filling defects present within duct.
- Persistent but improved pancreatic duct leak.
- Pancreatic stone debris extracted.
- Plastic pancreatic duct stent placed across the distal stricture (2 PD stents currently in place).

Plan

- Repeat cross-sectional imaging in 6-8 weeks for assessment of fluid collection
- Repeat ERCPs for stricture and fluid collection management

References

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