

## BACKGROUND

- Auto-immune pancreatitis (AIP) is an uncommon cause of recurrent pancreatitis
- Characterized by chronic inflammation with lymphocytic infiltration on histology
- It is classified as type 1, IgG4 related and type 2, idiopathic duct-centric type
- Prevalence of 2% of chronic pancreatitis
- Affects less than 1 per 100,000
- We describe a case suspicious for AIP, with pancreatic biopsy revealing metastatic lung adenocarcinoma

## CASE

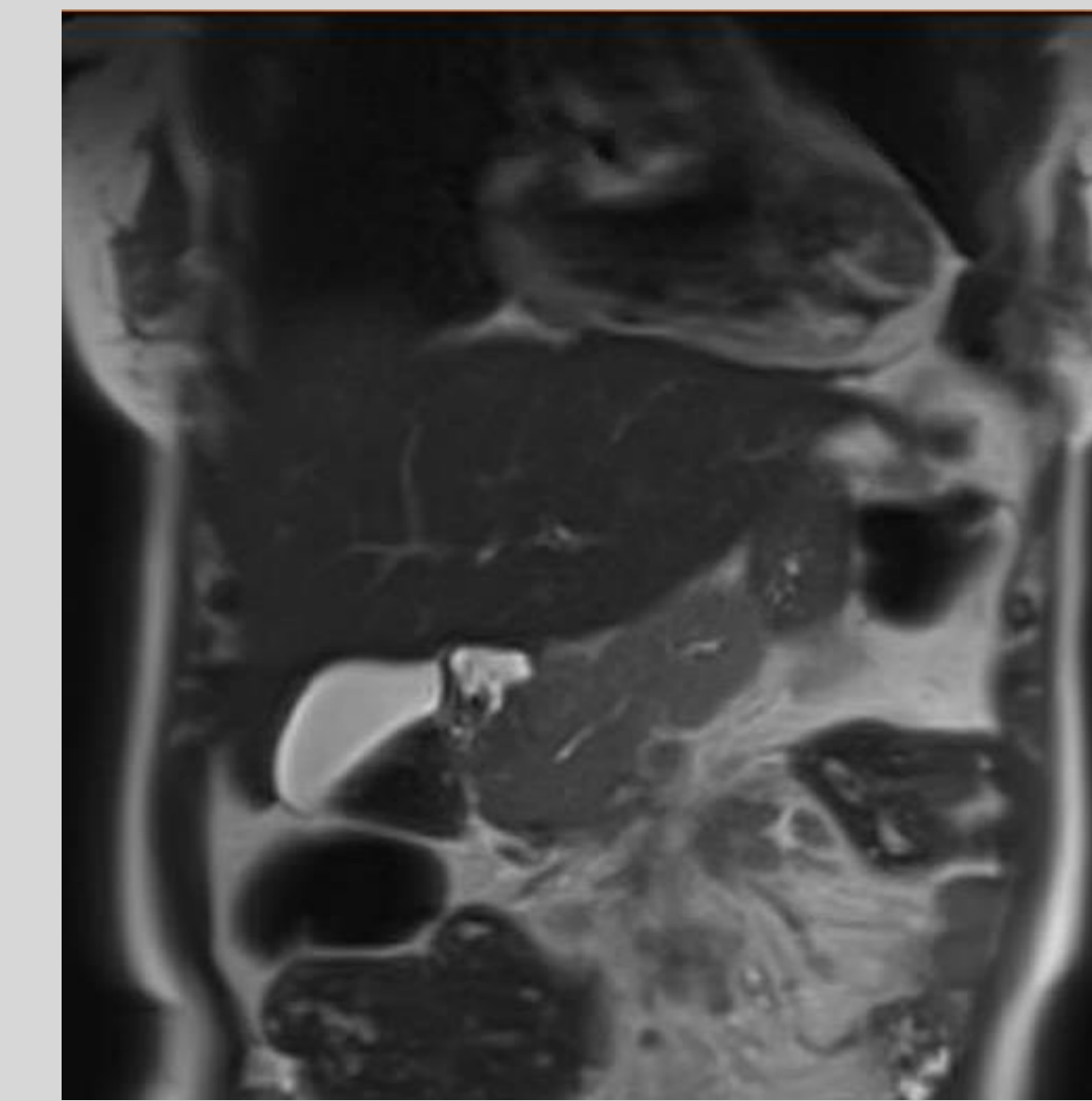
- A 56-year-old female, former 10 pack year smoker with no medical history presented with complaints of worsening abdominal pain for one day.
- Recent stay at an outside hospital for abdominal pain 5 days prior and was managed for gallstone pancreatitis.
- She underwent ERCP with removal of biliary sludge and was planned for outpatient cholecystectomy.
- Labs were significant for:
  - Lipase 1078
  - Bili 0.2, Alk phos 125, AST 25, ALT 15
  - ANA 1:360
  - IgG4 96 (nl 2-96)
- She was subsequently managed for acute pancreatitis.

## IMAGES



**Figure 1:** CT Abdomen/Pelvis

- Diffuse pancreatic enlargement with fullness most prominent at the head but no identifiable mass.
- Multiple enlarged retroperitoneal and mesenteric lymph nodes (LNs) measuring up to 2.5 cm.



**Figure 2:** MR Abdomen

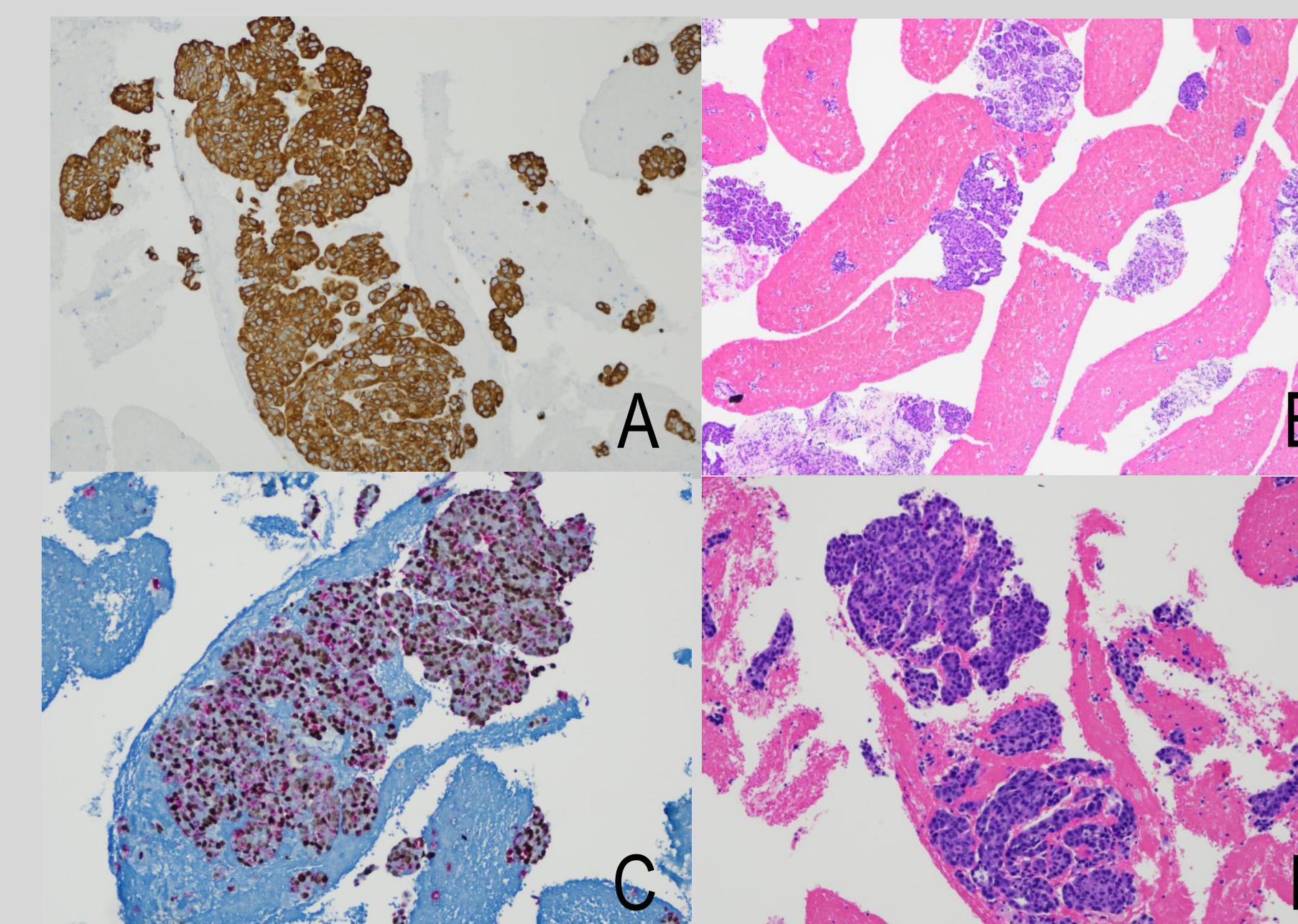
- Diffuse pancreatic enlargement without ductal dilatation
- Findings concerning for AIP versus malignancy



**Figure 3:** EUS with enlarged pancreas with no discrete mass



**Figure 4:** EUS with biopsy of mesenteric LNs



**Figure 5:** Pathology revealed metastatic adenocarcinoma consistent with lung primary, PDL1 positive.

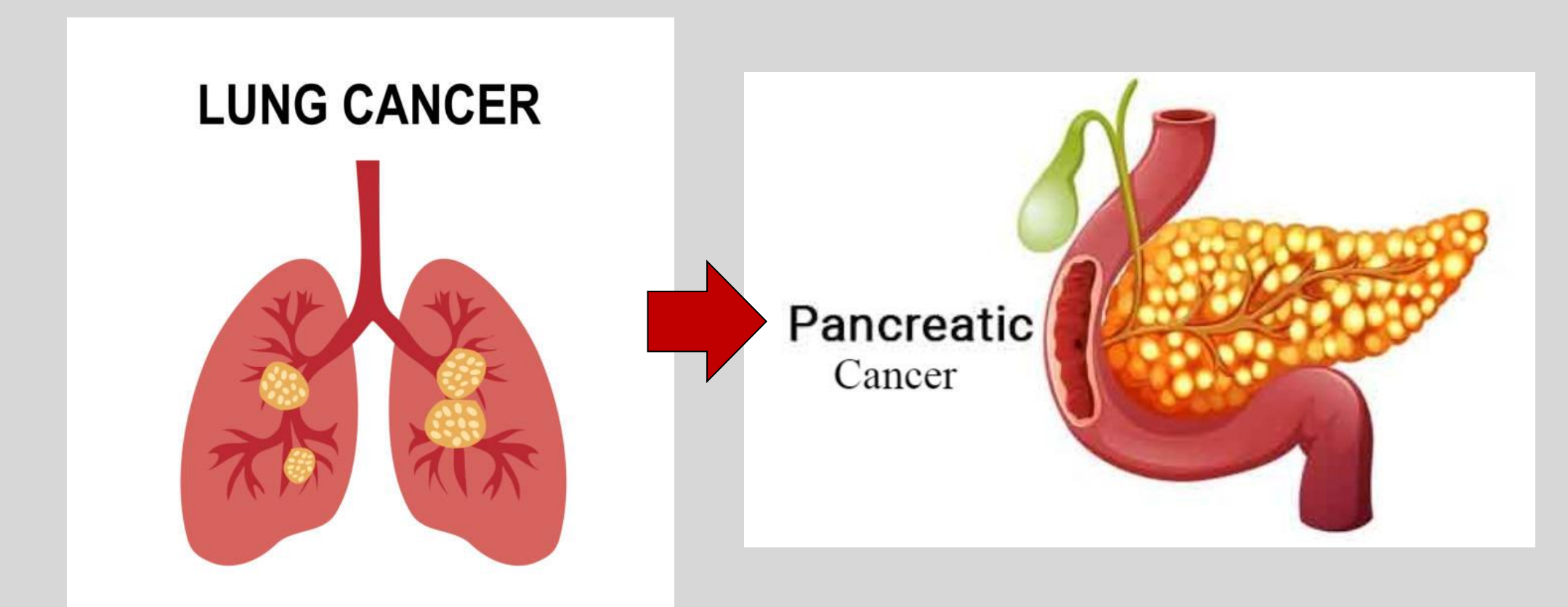
- A. Head of pancreas mass
- B. Mesenteric lymph node
- C. TTF1 and Napsin-A Immunohistochemical stain, diffusely positive lung cancer marker
- D. CK7-immunohistochemical stain, diffusely positive

• Outpatient CT Chest revealed few pulmonary micronodules of unclear significance and borderline sized mediastinal LNs

• She is currently following with oncology at another institution

## DISCUSSION

- Our patient presenting with clinical and radiographic features of AIP was diagnosed with metastatic lung cancer, a rare presentation of infiltrative metastasis mimicking autoimmune pancreatitis.



- While lung cancer is the 2nd leading cause of pancreatic metastasis, the literature has reported a few cases of lung cancer presenting as pancreatitis.
- 2 Japanese studies reported close temporality between AIP Type 1 diagnosis and cancer diagnosis, particularly with lung, stomach and prostate cancer, proposing the possibility that AIP occurs as an autoimmune paraneoplastic disease.
- Malignancy must be considered when evaluating for AIP and portends the necessity of endoscopic biopsy.

## REFERENCES

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