A Rare Case of Lipomatous Pseudohypertrophy of the Pancreas Diagnosed with EUS-FNA

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BACKGROUND

•Lipomatous pseudohypertrophy (LPH) of the pancreas is a rare benign entity of undetermined pathogenesis characterized by the enlargement of the pancreas due to replacement of exocrine parenchyma with adipose tissue in patients without obesity, diabetes, or pancreatitis.

•Adipose infiltration may be local or diffuse and forms a pseudotumor that mimics pancreatic malignancies, **which has led to unnecessary resections.**

•Endoscopic ultrasound with biopsy (EUS- FNA) has improved the ability to diagnose LPH and rule out malignancy.

•LPH is typically asymptomatic, however, abdominal pain may be a presenting symptom with steatorrhea due to exocrine insufficiency or jaundice due to mass effect seen in late stages.

Case Presentation

•48-year-old female with history of hypothyroidism and migraine.

• presented with epigastric pain, poor oral intake due to postprandial vomiting, and non-bloody mucoid diarrhea.

•Prior to admission, she had been having chronic GI symptoms and recent MRI demonstrated near complete fatty replacement of an enlarged pancreas causing mass effect with only a small amount of normal parenchyma remaining.

Diagnostic Workup

•Due to concern for other malignant process including liposarcoma, EUS-FNA was pursued. **The body (figure 1), Neck (figure 2) and tail of the pancreas (Figure 3) appeared diffusely hyperechoic and homogeneous, consistent with fatty replacement.**

•Biopsies showed bland pancreatic islets in a background of mature adipose tissue consistent with fatty replacement of the pancreas. (figure 4)

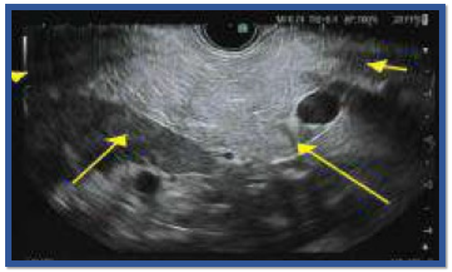

Figure 1

Figure 2

Figure 3

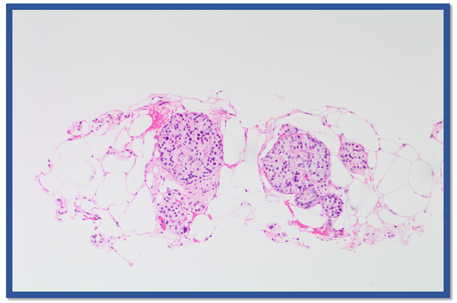

Figure 4

Establishing the Diagnosis

•These pathology findings showing bland pancreatic islets in a background of mature adipose tissue, in conjunction with pancreatic hypertrophy and compression on surrounding organs, supported the diagnosis of LPH of the pancreas.

• the Patient was ultimately treated conservatively with monitoring and pancreatic enzyme replacement therapy with improvement in symptoms.

Conclusion

•LPH is a rare, benign disorder which usually is discovered incidentally during work-up of other diseases.

•The mass formed by LPH mimics that of malignant disease which has led to unnecessary resections.

•The use of EUS-FNA to observe histological features and confirm diagnosis has led to a decrease in resections and differentiation from other causes of pancreatic fat infiltration.

•The pathogenesis remains unknown but is distinct from Pancreatic steatosis commonly seen in metabolic syndromes or inflammation.

•LPH typically managed with enzyme therapy when symptoms develop.

References:

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