

Background and aims

- Primary pancreatic lymphoma (PPL) is a rare extranodal lymphoma representing 0.5% of all pancreatic neoplasms.
- Prognosis and treatment strategies of PPL vastly differ from pancreatic ductal adenocarcinoma (PDAC), therefore making an accurate diagnosis is vital.
- Aim:** To describe the presentation, endoscopic ultrasound (EUS) features, and the role of fine needle aspiration (FNA) in the diagnosis of PPL compared with PDAC.

Methods

- Patients diagnosed with PPL at a single tertiary referral center were identified within a 10-year period.
- Age and gender-matched controls with a diagnosis of PDAC were selected in a 1:3 ratio.
- Patients who had peripancreatic lesions, lymph nodes, or bile duct masses were excluded.

Results

- 11 patients with PPL and 33 controls with PDAC were included.

Baseline characteristics	Adenocarcinoma (n=33)	Primary Pancreatic Lymphoma (n=11)	P value
Ethnicity, white n (%)	21 (63.6)	8 (72.7)	0.58
Smoking history (>15 pack-years), n (%)	9 (27.3)	5 (45.5)	0.26
Alcohol history (>1 drink/day), n (%)	7 (21.2)	2 (18.2)	0.83
Presenting symptoms			
Abdominal pain, n (%)	12 (36.4)	9 (81.8)	0.01
Jaundice, n (%)	11 (33.3)	6 (54.5)	0.21
Weight loss, n (%)	8 (24.2)	3 (27.3)	0.84
Incidental, n (%)	5 (15.2)	1 (9.1)	0.61
Located in the head of the pancreas, n (%)	23 (69.7)	9 (81.8)	0.43
Regional lymphadenopathy on imaging, n (%)	20 (60.6)	10 (90.9)	0.06

Results (continued)

EUS features	Adenocarcinoma (n=33)	Primary Pancreatic Lymphoma (n=11)	P value
Hypoechoic, n (%)	31 (93.9)	9 (81.8)	0.23
Heterogeneous, n (%)	2 (6.1)	4 (36.4)	0.01
Poorly defined, n (%)	23 (69.7)	8 (72.7)	0.85
Common bile duct dilation, n (%)	14 (42.4)	5 (45.5)	0.86
Pancreatic duct dilation, n (%)	23 (69.7)	3 (27.3)	0.01
Number of passes on FNA, mean (IQR)	3 (1-3)	5 (2-7)	0.008
Largest diameter on EUS (mm), median (IQR)	31 (25-38.8)	45.8 (35.5-56)	0.001

Management	Adenocarcinoma (n=33)	Primary Pancreatic Lymphoma (n=11)	P value
Chemotherapy, n (%)	29 (87.9)	10 (90.9)	0.78
Radiation therapy, n (%)	17 (51.5)	2 (18.2)	0.053
Surgery, n (%)	7 (21.2)	1 (9.1)	0.37

Conclusion

- Making an accurate distinction between PPL and PDAC is critical as treatment and prognosis radically differ.
- Tissue diagnosis is more challenging in PPL as reflected by a significantly higher number of passes obtained on EUS-FNA.
- Certain EUS features are beneficial in differentiating PPL from PDAC, as PPL tend to be larger, more likely heterogeneous, and are less likely associated with pancreatic duct dilation compared to PDAC.