A 64-year-old diabetic woman presented with a 1-week history of abdominal pain and cholestatic jaundice. Her laboratory tests showed: leukocyte count 7.2 x 10^9/L (normal range 3.5 – 10.5 x 10^9/L), total bilirubin 10.5 mg/dL (0.1 – 1.0 mg/dL), aspartate aminotransferase (AST) 337 U/L (12 – 31 U/L), alanine aminotransferase (ALT) 624 U/L (9 – 29 U/L), alkaline phosphatase 724 U/L (50 – 130 U/L), lipase 24 U/L (10 – 73 U/L), CA 19-9 38 units/mL (< 55 units/mL) and IgG4 137 mg/dL (8 – 140 mg/dL). Abdominal computed tomography revealed a pancreatic head mass that was encasing the portal vein and common hepatic artery but sparing the superior mesenteric artery, with evidence of peripancreatic and portal lymphadenopathy; there was no evidence of hepatic or splenic involvement (Fig. 1). Her chest radiograph was normal. Endoscopic ultrasound (EUS) revealed a 4.3-cm, echo-poor pancreatic head mass and a 1.4-cm (short axis) peripancreatic lymph node (Fig. 2, 3). EUS-guided fine-needle aspiration (EUS-FNA) of the pancreatic head and of the peripancreatic lymph node was performed.

The patient was diagnosed with primary pancreatic lymphoma. EUS-FNA of the pancreatic mass revealed very unusual atypical large lymphocytes, an appearance suspicious of but not diagnostic for large B-cell lymphoma (Fig. 4). A Trucut biopsy of a cytologically suspicious peripancreatic node confirmed the diagnosis (Fig. 5). Immunoperoxidase studies of the Trucut biopsy tissue demonstrated large atypical lymphoid cells that were positive for CD45 and CD20 (Fig. 6). The patient’s bone marrow examination was normal.

Primary pancreatic lymphoma accounts for less than 1 % of extranodal non-Hodgkin’s lymphomas, of which 58 % are of the large-cell type [1]. Diagnosis and subtyping can be achieved by EUS-FNA with adjuvant flow cytometry [2-4]. As EUS-FNA can fail to establish a definitive diagnosis of lymphoma, a Trucut biopsy can yield useful diagnostic and prognostic information, excluding carcinoma for example [5]. This case serves as a reminder that...
EUS Trucut biopsies can be useful as an adjunctive rescue technique when standard cytological techniques are inconclusive.

References
2 Saif MW. Primary pancreatic lymphomas. JOP 2006; 7: 262–273

Bibliography
Endoscopy 2008; 40: E23–E24
© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author
M. J. Levy, MD
Division of Gastroenterology and Hepatology
Mayo Clinic College of Medicine
200 First Street SW, Charlton 8
Rochester
Minnesota 55905
USA
Fax: +1-507-266-3939
levy.michael@mayo.edu

Fig. 5 Histological examination of the Trucut biopsy of the lymph node showed sheets of non-cohesive, large neoplastic cells with necrosis (on the left of the image) (hematoxylin and eosin stain, original magnification × 400).

Fig. 6 Immunohistochemical staining showed the malignant cells to be positive for CD20 (original magnification × 400).

Endoscopy_UCTN_Code_CCL_1AF_2AZ_3AB

F. C. Gleeson¹, L. Zhang², M. J. Levy¹
¹ Division of Gastroenterology and Hepatology, Mayo Clinic College of Medicine, Rochester, Minnesota, USA
² Department of Pathology, Mayo Clinic College of Medicine, Rochester, Minnesota, USA