Endoscopic Ultrasonography of a Pancreatic Lymphoma

Several studies have confirmed the high degree of accuracy of endoscopic ultrasonography (EUS) in the diagnosis and staging of pancreatic carcinoma (1,2). We report here on one case of pancreatic lymphoma evaluated by EUS.

A 78-year-old man was admitted to our hospital in December 1995 complaining of melena. The esophagogastroduodenoscopy revealed a 2 cm wide ulcer in the first part of the duodenum with indurated and irregular margins and extrinsic compression. Histopathological examination of a biopsy specimen revealed a non-Hodgkin's lymphoma infiltrating the duodenal mucosa, with a small cleaved-cell lymphoma. A B-cell phenotype was identified. Abdominal ultrasonography and computed tomography (CT) demonstrated a large, heterogeneous mass in the pancreas measuring 12 cm in diameter, with no dilatation of the common bile duct. EUS (Olympus EUM-20) revealed a normal common bile duct and papilla of Vater, and showed a large and diffuse hypoechoic tumor mass in the pancreas without cysts or calcifications. The EUS findings revealed accentuation of the hypoechoogenicity in the layered structure of the duodenal wall (Figure 1), suggesting that the lymphoma extended from the outside with interruption and penetration of the wall by the adjacent mass. We noted large celiac, splenic, mesenteric, gastrohepatic and para-aortic lymph nodes. EUS also showed a hyperechoic thickness in the common pancreatic duct wall, which was dilated (4 mm), contrasting with the adjacent hypoechoic pancreas (Figure 2). Percutaneous CT-guided needle biopsy of the pancreas confirmed infiltration localized and confined to the pancreas and with the same immunophenotypic analysis.

It is not possible to distinguish pancreatic lymphoma from pancreatic adenocarcinoma using clinical and radiological criteria (ultrasound and CT). It may be also very difficult to distinguish between an intrinsic pancreatic abnormality and secondary pancreatic invasion from contiguous lymph nodes (3,4). EUS has made the distinction possible. This first EUS image of a pancreatic lymphoma seemed clear to us due to its specific appearance, which is completely different from that of all other tumors. Other EUS observations of pancreatic lymphomas would be useful to support our EUS criteria, helping to identify

Figure 1: Endosonographic appearance of a pancreatic lymphoma. Parenchymal changes in the pancreas head: large and diffuse hypoechoic mass. Increased hypoechoogenicity in the layered structure of the duodenal wall (arrow) by the adjacent pancreatic lymphoma.

Figure 2: Tickness, hyperechoicity and dilatation of the pancreatic duct (arrow), contrasting with the hypoechoic parenchymal pancreas (body and tail).

fy the lesions better. The role and value of EUS-guided fine-needle aspiration biopsy (5) would need to be defined when pancreatic lymphoma is suspected from the EUS findings. Our EUS criteria for pancreatic lymphoma are: a strongly hypoechoic appearance in the pancreas, hypertrophy in all its segments, a hyperechoic wall in the common pancreatic duct contrasting with the adjacent parenchyma, and multiple isoechoic peripancreatic lymph nodes.

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