A Case of Duplication of the Main Pancreatic Duct

Variations in the morphology of the pancreatic duct are a frequent phenomenon seen in endoscopic retrograde cholangiopancreatography (1–3). Knowledge of the different variations and anomalies of the papilla, pancreas, and biliary duct system is important in order to understand their possible significance and to avoid misinterpretations (4). Common anomalies include pancreas divisum, annular pancreas, and others. Variations such as duplication of the main pancreatic duct within the body of the pancreas seem to be rare, but detailed figures are not available (1, 5).

A 59-year-old woman was admitted, complaining of repeated episodes of intermittent pain in the abdominal region and alternating phases of diarrhea and constipation. The patient underwent percutaneous sonography of the pancreas, which revealed an augmented echo density. At ERCP, performed with Olympus duodenoscope JF-130 using an Endoflex ERCP cannula with a conical metal tip, the papilla of Vater and the biliary tract appeared normal. However, we found a duplication of the pancreatic duct in the body of the pancreas (Figures 1, 2). In this case, the variation did not seem to be obstructing normal flow of the pancreatic juice; no secondary changes proving chronic pancreatitis could be found. Esophagogastroduodenoscopy, colonoscopy, and repeated stool chymotrypsin tests and routine laboratory tests showed normal findings. The ultimate diagnosis was irritable bowel syndrome.

However, it is important to distinguish this rare variation of the main pancreatic duct from deviations and stenoses caused by calculi or neoplastic lesions. The existence of a duplication of the pancreatic duct may be a predisposing factor in the development of pancreatitis, or may be associated with an increase in surrounding tissue masses, suggesting pancreatic tumor (1, 6).

Six months later, the clinical course, CT, and sonography have shown no evidence of either pancreatitis or tumor.

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Figure 1: Pancreatogram, showing duplication of the main duct in the body of the pancreas.

Figure 2: Detail of Figure 1: duplication of the main duct.

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