

**Title:**

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**When Aunt Minnie turns out to be a Zebra: distal bile duct adenomyoma simulating a pancreas head tumor**

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*Dear Editor,*

A 55-year-old female patient with a history of ethyl and nicotine abuse presented with chronic diarrhea, significant weight loss and abnormal liver tests. Ultrasound examination revealed dilatation of the bile ducts and computed tomography scan with IV contrast further established simultaneous dilatation of the common bile duct and pancreatic duct (double duct sign). The dilatation abruptly stopped at the level of the pancreatic head which demonstrated a small irregular hypovascular zone (1.2 cm), suspected as malignant. The following week, a radical pancreaticoduodenectomy was performed. Anatomopathological analysis revealed an adenomyoma (12 mm) located distal to the common bile duct, without characteristics of malignancy.

An adenomyoma is a benign lesion rarely diagnosed in the extrahepatic biliary ducts which can mimic malignancy. In the current case, the adenomyoma was associated with a small focus (0.9 mm) of high-grade pancreatic intraepithelial dysplasia (1) showing a slight accentuation of p53 expression without signs of malignancy. Smooth muscle actin staining showed a sharply defined smooth muscle cell proliferation around glandular structures,

typical for adenomyoma and the Ki-67 proliferation index, assessed using the MIB-1 antibody which was less than 1%, supporting the non-malignant character of the adenomyoma (3). No lymph node invasion or perineural invasion were identified. Treatment of a symptomatic adenomyoma associated with high grade pancreatic intraepithelial dysplasia and bile duct occlusion may indeed require local resection. However, an extensive surgery such as pancreaticoduodenectomy should be avoided given the high risk of complications associated with this procedure.

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Fig. 1. Significant dilatation of the intrahepatic bile ducts associated with simultaneous dilatation of the common bile duct (white arrow) and pancreatic duct (yellow arrow), popularly known as the “double duct sign”.