

Accidental placement of a biliary endoprosthesis in the portal vein

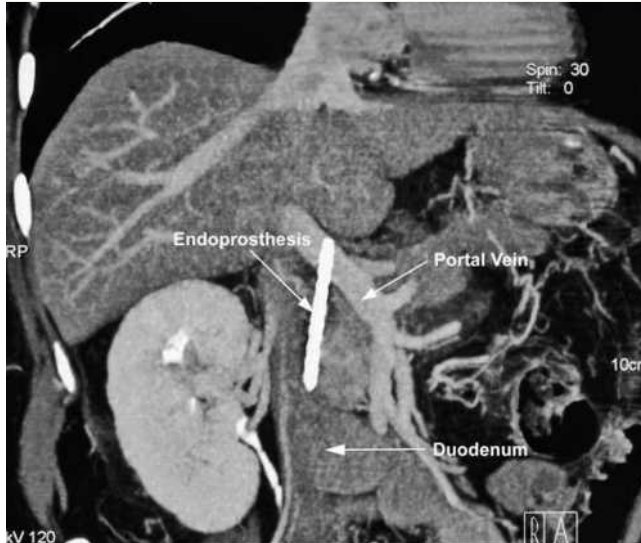


Fig. 1 CT showing that the proximal part of the endoprosthesis is in the portal vein.

A 58-year old man presented with jaundice. Imaging studies showed a pancreatic mass suggesting cancer. A 7-Fr biliary endoprosthesis was introduced. Seven days later the man was readmitted with increasing jaundice, and exchange of the endoprosthesis was requested. The procedure was performed in an endoscopy room without radiography facilities. The endoprosthesis was removed; access to the biliary system seemed straightforward. Contrast injection with fluoroscopy showed duct dilatation and a 9-cm, 10-Fr endoprosthesis was introduced. Immediately, bleeding originating from the endoprosthesis was observed that stopped after 4 minutes. CT was performed (● Fig. 1). The hemoglobin level remained stable. That same day pancreaticoduodenectomy was performed. No bleeding problems were encountered upon removal of the endoprosthesis. Several thrombi were removed from the portal vein. At histopathology pancreatic adenocarcinoma was found. Seven years later there is no evidence to suggest residual or recurrent disease.

Although opacification of the portal system during endoscopic retrograde cholangiopancreatography has been described previously in patients with pancreatic [1–3] or other malignancies [4], we are unaware of reports on the notable complication we experienced. In retrospect, it became clear that immediately following cannulation of the papilla the portal vein was entered. After contrast injection the portal system was thus confused with the biliary system. Early clogging of the stent explains the absence of hemodynamic consequences. The lesson to be learnt from our case seems to be that fluoroscopy may fail to distinguish the portal venous from the biliary system, particularly with short fluoroscopy time and failure to recognize unusual rapid, hepatopetal disappearance of contrast medium. Endoscopists should be aware that the portal vein runs parallel to the common bile duct, and that the diameter and intrahepatic branching may look quite similar. During placement of biliary endoprostheses, careful radiographic documentation of the correct anatomy should be preferred.

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H. R. van Buuren¹, J. J. Hermans²,
C. C. J. van Eijck³

¹ Department of Gastroenterology, Erasmus MC, University Medical Centre, Rotterdam, The Netherlands

² Department of Radiology, Erasmus MC, University Medical Centre, Rotterdam, The Netherlands

³ Department of Surgery, Erasmus MC, University Medical Centre, Rotterdam, The Netherlands

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Corresponding author

H. R. van Buuren, MD, PhD

Erasmus MC, University Medical Centre Rotterdam
Department of Gastroenterology

Room HA 203

PO Box 2040

3000 CA Rotterdam

The Netherlands

Fax: +31-10-4365916

h.vanbuuren@erasmusmc.nl