

Bile duct tumour thrombosis: hepatocellular carcinoma presenting with obstructive jaundice

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An 80-year-old man with known cirrhosis presented with jaundice and a liver lesion. A computed tomography scan (**Figure 1**) and a magnetic resonance cholangiopancreatography scan (**Figure 2**) were performed to investigate the cause of persistent jaundice and biliary sepsis. Both revealed intrahepatic duct dilatation as a result of tumour thrombus, a diagnosis confirmed histologically with tissue biopsy.

Jaundice in the context of hepatocellular carcinoma may represent tumour dissemination into the biliary tree, known as bile duct tumour thrombosis. Bile duct tumour thrombosis is rare, accounting for only 1.2–12.9% of all hepatocellular carcinomas (Wong et al, 2015). It can be difficult to diagnose, as fluctuating jaundice may mimic other benign causes of ductal obstruction. Persistent obstructive jaundice in patients with risk factors for hepatocellular carcinoma should raise concerns for bile duct tumour thrombosis (Kojiro et al, 1982). Extensive surgical resection, rather than thrombectomy, remains the recommended treatment. Rammohan et al (2015) reported a 5-year survival of just 10% in patients with both hepatocellular carcinoma and bile duct tumour thrombosis compared to 38% in patients with hepatocellular carcinoma but without bile duct tumour thrombosis. Poorer survival may be attributable to tumour burden, delayed diagnosis, vascular invasion and resection, and chronic biliary obstruction. Biliary thrombus significantly worsens the prognosis of hepatocellular carcinoma.

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Figure 1. Coronal computed tomography scan showing persistent dilatation of the common bile duct as a result of tumour thrombus.



Figure 2. Magnetic resonance cholangiopancreatography scan showing intrahepatic duct dilatation as a result of biliary thrombus.

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