

Soft-tissue case 52. Diagnosis

Hepatocellular carcinoma with tumour cast in the biliary tree

The most common presentation of hepatocellular carcinoma is right upper quadrant discomfort or pain. Jaundice is also common. Its cause is usually hepatic insufficiency. Rarely, jaundice may be due to obstruction of the biliary system,¹ such as intraluminal obstruction, extraluminal bile duct obstruction or hemobilia.²

The cholangiogram in Fig. 4 shows a tumour cast in the common bile duct (arrow), resembling a cork in the neck of a bottle.² The right ductal system is not visible. In Fig. 5,

the cholangiogram shows invasion of the tumour into and along the right hepatic duct (arrow).

In patients with hepatocellular carcinoma, it is important to determine the underlying cause of jaundice, which may be due to obstruction of the biliary tree or hepatic insufficiency. The obstruction should be first relieved by endoscopic insertion of an internal stent, nasobiliary drainage, percutaneous transhepatic biliary drainage or surgical intubation. External drainage is preferred to internal stenting because the high tumour cell content in the bile proximal to the tumour cast can cause the stent to block easily. Indeed, our patient had blockage of his stent 3 days after insertion, and a new stent had to be placed. After the obstruction has been managed, investigations should be carried out to see if the tu-

mour can be resected with an intent to cure.

Survival in patients who undergo resection is better than in those without resection and the prognosis of patients who receive palliative drainage for obstruction is better than for patients with jaundice due to hepatic insufficiency.³⁻⁵ For patients whose tumour is unresectable, transarterial chemo-embolization or systemic chemotherapy can be considered when biliary drainage has improved liver function.

Hepatocellular carcinoma with tumour cast causing biliary obstruction is rare. With appropriate investigation and treatment, prolonged survival or even cure is possible.

References

1. Afroudakis A, Bhuta SM, Ranganath KA, Kaplowitz N. Obstructive jaundice caused by hepatocellular carcinoma. Report of three cases. *Am J Dig Dis* 1978;23:609-17.
2. Lau WY, Leow CK, Leung KL, Leung TW, Chan M, Yu SC. Cholangiographic features in the diagnosis and management of obstructive icteric type hepatocellular carcinoma. *HPB Surgery* 2000;11:299-306.
3. Lau WY, Leung KL, Leung TW, Liew CT, Chan MS, Yu SC, et al. A logical approach to hepatocellular carcinoma presenting with jaundice. *Ann Surg* 1997;225:281-5.
4. Shimada M, Takenaka K, Hasegawa H, Shirabe K, Gion T, Kano T, et al. Hepatic resection for icteric type hepatocellular carcinoma. *Hepatogastroenterology* 1997;44:1432-7.
5. Tantawi B, Cherqui D, Tran van Nhieu J, Kracht M, Fagniez PL. Surgery for biliary obstruction by tumour thrombus in primary liver cancer. *Br J Surg* 1996;83:1522-5.

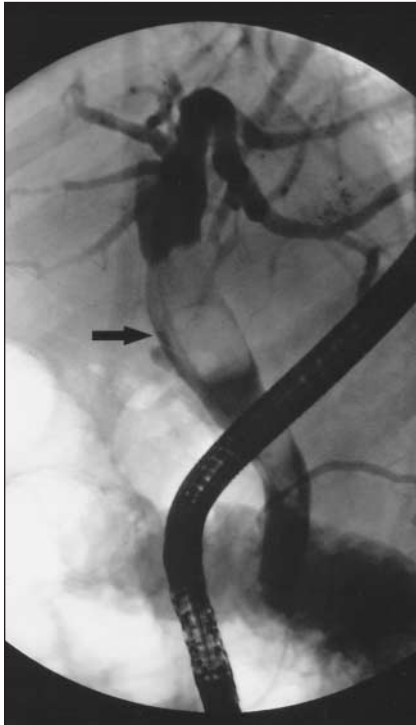


FIG. 4.



FIG. 5.