

Major hepatectomy for hepatoma invading the main portal vein

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Resection or liver transplantation offers the only chance for cure in hepatocellular carcinoma (HCC). Portal vein tumour invasion is seen in 15-20% of the cases and carries a poor prognosis [1]. Most centres consider it a contraindication for aggressive treatment.

A 68 year old patient was found to have a 15cm HCC in the right lobe of liver. The tumour was invading the right portal vein, main portal vein and extending to the left branch (Figure 1) (RPV). The liver was non-cirrhotic. Positron Emission Tomogram (PET) scan confirmed that there was no extra-hepatic disease. The left lobe measured 650ml and was adequate for surgical resection. Considering his excellent general condition and impending portal vein obstruction surgical resection was offered.

The anterior approach was used for the hepatectomy. Hilum was dissected and the portal vein was exposed after dividing the right hepatic artery and the right branch of bile duct. Proximal control of the portal vein was gained first, just above its origin. After dividing left caudate branches

the left portal vein was controlled just before it entered the hilar plate (Figure 1). After clamping the main and left portal veins, right branch was opened longitudinally. The tumour thrombus was removed from the left and main portal veins. RPV was divided. Left portal vein clamp was removed to allow back bleeding. Portal vein was closed with 5/0 polypropylene. Transection was continued with cavitron ultrasonic suction aspirator (CUSA) and diathermy. The patient made an uneventful recovery. He is free of recurrence three months after surgery.

References

Journal Articles

1. Aldrighetti L, Pulitanò C, Catena M, Arru M, Guzzetti E, Halliday J, et al. Liver resection with portal vein thrombectomy for hepatocellular carcinoma with vascular invasion. *Annals of Surgical Oncology*. 2009; **16**(5): 1254.

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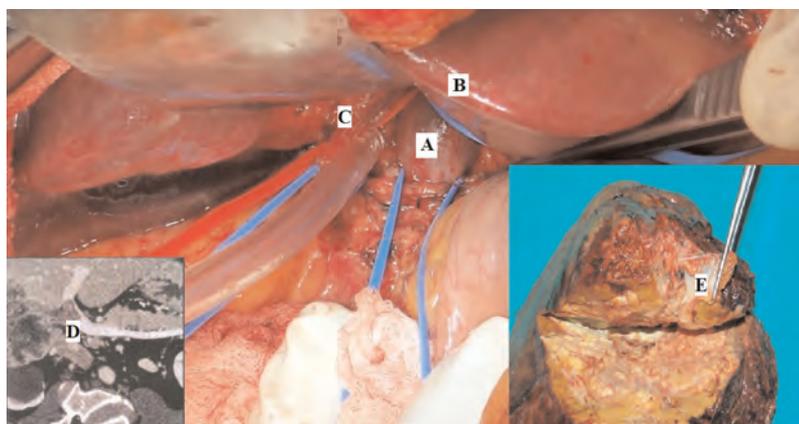


Figure 1. A- Main Portal vein, B- Left Portal Vein, C- Right Portal Vein, D- Computed Tomogram showing Tumour invading the portal vein, E- Tumour in Main Portal Vein.

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