

# Methods of parenchymal transection

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An array of techniques and technologies have been developed to aid parenchymal dissection by facilitating identification of vascular and biliary structures to enable accurate diathermy, ligation or clipping. They also allow safe resection with adequate clearance of centrally placed tumours near the confluence - of the hepatic veins and the IVC or the inflow sheaths. Safe transection with minimal blood loss and an adequate tumour clearance can be achieved using a crushing clamp, cavitating ultrasonic suction and aspiration (CUSA), harmonic scalpel or radiofrequency ablation (RFA) and is a matter of personal preference with no evidence that any method is superior ( Figure 69.20 ). Hepatic veins and the Glissonian sheath are now routinely stapled with an endoscopic vascular stapler. The parenchyma is divided after diathermy of the liver capsule along the plane of demarcation 5 /uni00A0 mm into the devascularised liver. As the parenchyma is divided, vessels and bile ducts are diathermised, clipped or ligated depending on their size. The hepatic veins can be divided outside the liver at the time of mobilisation or parenchymal dissection continued until they are encountered, when they are ligated or stapled then divided.

Figure 69.20 Hepatectomy post resection. Cut surface of the residual liver following a right hepatectomy in which segments V-VIII have been removed. On the lower edge, the portal vein and bile duct can be seen.

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