



Resection of the Dorsal Sector of the Liver: The Anterior Transhepatic Approach

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ABSTRACT

Background. As defined by Couinaud et al. and Takasaki et al., the dorsal sector (DS) or caudate area is the portion of liver parenchyma located between the retrohepatic inferior vena cava (IVC) and the main hepatic veins confluence.^{1,2} Its complete resection, usually approached by right- or left-sided liver parenchymotomy, remains technically challenging.^{3,4} Moreover, these approaches usually fail to properly expose the middle (paracaval portion) and most cranial portion (i.e. behind the hepatic vein confluence) of the DS.⁵

Methods. We report the case of a 50-year-old woman presenting with a unique metachronous hepatic metastasis of a colorectal adenocarcinoma. The 40-mm lesion was located behind the confluence of the three main hepatic veins, in front of the IVC, and extended caudally behind the hepatic hilum, thereby occupying the paracaval portion of the DS. The tumor board decision was surgical resection.

Results. The procedure included complete anatomic resection of the DS using an anterior transhepatic approach by opening the liver midplane along the Cantlie line. A well-tolerated continuous pedicle and IVC clamping of 30 min was used. The duration of the surgery was 120 min, and the blood loss was 200 mL. The patient was discharged on postoperative day 5. R0 resection was achieved and the patient was free of disease at 1 year post-surgery.

Conclusion. Anatomic resection of the DS using a transparenchymal anterior approach is a safe and feasible procedure especially suitable for voluminous tumors. It allows the control of all major vascular structures narrowing the lesion, and facilitates an R0 resection.

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