Laparoscopic Hepatic Posterior Sectionectomy: A Hand-assisted Approach

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ABSTRACT

Background. Hepatic resection remains a challenging procedure in laparoscopy, requiring trained surgical teams and specialized centers.^{1–3} Operating on the posterior segments of the liver brings additional concerns, such as vascular control, right liver mobilization from the retroperitoneum and diaphragm, and a large transection area.^{1,3–6} Here we present a case of a hepatitis B-positive 42-year-old woman with a neoplastic nodule on the right posterior section of the noncirrhotic liver.

Methods. Pneumoperitoneum was made through a hand port, and three additional trocars were placed. Intrahepatic glissonian pedicle control was achieved after liver mobilization. Parenchymal transection was performed through the demarcation line between the anterior well vascularized and the posterior ischemic right segments of the liver. All surgical steps were performed with hand assistance.

Results. Operative time was 210 min, and estimated blood loss was 300 ml. Postoperative was uneventful. The patient was discharged on the fourth postoperative day. Histological evaluation confirmed the diagnosis of a well-differentiated hepatocellular carcinoma. The patient was free of disease after 18 months of follow-up.

Discussion. Our video shows a standardized operative strategy in which the hand assistance plays important role. Posterosuperior segments of the liver are still less often approached by laparoscopic surgery as a result of its

limitations on visualization, mobilization, pedicle control, and parenchymal transection.^{1,3,6} Hand assistance helps solve these issues, making assisted resection easier than a purely laparoscopic approach and more advantageous over the open technique, providing the benefits of laparoscopy without compromising oncological safety.⁷

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