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ORIGINAL ARTICLE – HEPATOBILIARY TUMORS

Full Laparoscopic Anatomical Segment 8 Resection for Hepatocellular Carcinoma Using the Glissonian Approach with Indocyanine Green Dye Fluorescence

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ABSTRACT

Background. Anatomical resections have been reported to achieve better long-term outcomes compared with partial resections for the treatment of hepatocellular carcinoma (HCC). Despite this, laparoscopic anatomical resections are very challenging operations, especially when approaching the posterosuperior segments of the liver (IVa, VII, and VIII). We report a full laparoscopic anatomical segment 8 resection focusing on the technical aspects of the Glissonian approach.

Methods. A routine follow-up CT scan of an 80-year-old women affected by hepatitis C-related liver cirrhosis showed a 3-cm HCC in segment 8. Three-dimensional reconstruction was performed to evaluate the liver anatomy, the relationship of the lesion with major vessels, and the borders of segment 8. A true anatomical segmentectomy was performed by using selective occlusion of segment's 8 Glissonian pedicle, which was identified from the liver hilum. Indocyanine green (ICG) dye demarcation was used as a guidance during parenchymal transection.[1–4]

Results. Operative time was 420 min, and blood loss was 261 mL. The patient had an uneventful postoperative course and was discharged home after 8 days.

Conclusions. Full laparoscopic anatomical segment 8 resection is a technically challenging operation. The use of the Glissonian approach and the aid of ICG dye could be of help, but advanced laparoscopic skills are necessary to complete such a difficult procedure safely.[5–13]

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