Introduction

Hepatocellular cancer (HCC) is the sixth most common malignant tumor worldwide and the most common primary liver cancer (1). Liver resection or liver transplantation is the therapeutic gold standards in patients with HCC. Laparoscopic liver resection is commonly performed worldwide in patients with HCC and underlined liver disease (2). Since 2008, the Louisville consensus of experts suggested that the best indications for laparoscopy were solitary lesions less than 5 cm, located in the anterior segments, at a distance from the line of transection, the hepatic hilum, and the vena cava (3).

Clinical vignette

We present a video case of a 51-year-old man admitted to our surgical and liver transplantation unit for hepatocellular cancer (HCC). Patient has a HCV cirrhosis with portal hypertension and esophageal varices F1. Child Pugh score was B7 and model of end staged liver disease (MELD) was 11. Body mass index (BMI) was 26.7 and ASA score was 2. No previous abdominal surgery. According with our multidisciplinary group we suggest a laparoscopic left lobectomy for the patient. Pringle manoeuvre was not performed. Operation time was 193 min and blood loss estimation was 100 cc. No transfusion was required. Postoperative course was uneventful, grade I of Clavien-Dindo Classification. Patient was discharged in day 8. In our experience laparoscopic resection in cirrhotic liver should be performed in selected patients and in an experienced team.

Surgical technique

Patient was placed supine on the operative table with lower limbs apart, the surgeon between the legs. Access to the abdomen was gained by open technique and pneumoperitoneum was maintained at 12 mmHg. A 10-mm port at the umbilicus housed a 30° video-camera. The other three trocars were positioned along a semicircular line with the concavity facing the right subcostal margin. Surgical procedure is displayed on Figure 1. Diagnostic laparoscopy was first performed and the liver was examined using laparoscopic ultrasonography (US) to confirm the
extension of the HCC. Steep reverse trendelenburg position was maintained. Hepatic transection was performed with Enseal device (Ethicon Endo-Surgery Inc., Cincinnati, OH, USA), clips, and application of Endo GIA vascular staples (Tyco Healthcare) on the portal pedicles. The procedure was completed following isolation and control of the left hepatic vein. After section, the specimen was placed in a bag and extracted following enlargement of the camera port. Pringle manoeuvre was not performed. Operation time was 193 min and blood loss estimation was 100 cc. No transfusion was required. Post-operative course was uneventful, grade I of Clavien-Dindo Classification. Patient was discharged in day 8.

Comments

Laparoscopic liver resection in cirrhotic patient for HCC is described in several studies with limited numbers of cases. Laparoscopic approach is associated with less blood loss, shorter hospital stay and not compromise oncological principles (5). In our experience laparoscopic resection in cirrhotic liver should be performed in selected patients and in an experienced team. Furthermore, laparoscopic liver resection facilitated eventual secondary surgery as liver transplantation (6).

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References