

Laparoscopic right hemihepatectomy for hepatolithiasis

M. A. C. Machado · F. F. Makdissi · R. C. T. Surjan · A. R. F. Teixeira ·
A. Sepúlveda Jr · T. Bacchella · M. C. C. Machado

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Abstract

Background Liver resection is the definitive treatment for unilateral hepatolithiasis [1]. Recently, laparoscopic major hepatectomies have become more common and are being performed in highly specialized centers [2–4]. However, few laparoscopic liver resections for hepatolithiasis have been reported. Chen et al. [5] reported two cases of laparoscopic left lobectomy for hepatolithiasis, but to our knowledge, right hepatectomy has never been reported to date. This video demonstrates technical aspects of a totally laparoscopic right hepatectomy in a patient with hepatolithiasis.

Methods A 21-year-old woman with right-sided nonoriental primary intrahepatic stones [1] was referred for surgical treatment. The operation followed four distinct phases: liver mobilization, dissection of the right portal vein and right hepatic artery, extrahepatic dissection of the right hepatic vein, and parenchymal transection with harmonic shears and linear staplers for division of segment 5 and 8 branches of the middle hepatic vein. No Pringles' maneuver was used. In contrast to liver resection for other indications, the right bile duct was enlarged and filled with stones. It was divided during parenchymal transection and left open. After removal of the surgical specimen, the

biliary tree was flushed with saline until stone clearance, under radioscopy surveillance, was complete. The right hepatic duct then was closed with running suture.

Results The operative time was 240 min, and the estimated blood loss was 120 ml, with no blood transfusion. The hospital stay was 5 days. At this writing, the patient is well and asymptomatic 7 months after the procedure.

Conclusion Laparoscopic liver resection is safe and feasible for patients with hepatolithiasis and should be considered for those suffering from intrahepatic stones.

Keywords Hepatolithiasis · Laparoscopy · Liver · Technique

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M. A. C. Machado (✉) · F. F. Makdissi ·
R. C. T. Surjan · A. R. F. Teixeira · A. Sepúlveda Jr ·
T. Bacchella · M. C. C. Machado

Department of Gastroenterology, University of São Paulo,
Brazil, Rua Evangelista Rodrigues 407-05463-000, São Paulo,
Brazil

e-mail: dr@drmarcel.com.br