Laparoscopic Partial Hepatectomy for Inflammatory Pseudotumor of the Liver

A 50-year-old man was admitted for further examination of a 10-mm hepatic mass in subsegment 4. He had cirrhosis of the liver as a result of alcohol abuse, and hepatitis virus markers were all negative. Dynamic computed tomography (CT) revealed a 10-mm hypervascular tumor in the early phase (Figure 1). On angiography, the tumor was hypervascular, and arterial portographic CT showed that the tumor was low density, indicating that it had no portal flow. Based on these findings, preoperatively we considered the tumor to be a hepatocellular carcinoma.

As the tumor was small and located at the edge of the liver, we resected it by laparoscopic partial hepatectomy [1,2]. Under general anesthesia, pneumoperitoneum was induced with CO₂ gas using a CO₂ insufflator. The tumor could be observed laparoscopically at the edge of the liver (Figure 2). The surface of the liver was nodular, and appeared to exhibit complete cirrhosis. After the extent of the tumor was carefully determined with laparoscopic ultrasonography, the tissues surrounding the tumor were punctured with an electrode needle and coagulated with 80 W for 45 seconds with a microwave tissue coagulator (Microtaze OT-110M; Nippon Shoji Ltd., Osaka, Japan) [3]. The coagulated tissues were dissected with an ultrasonically activated scalpel (Laparosonic Coagulating Shears (LCS); Johnson and Johnson Medical, K.K., Tokyo, Japan) [4]. The resected liver tissue was placed inside a plastic bag. The bag was then extracted through a slightly enlarged wound created by puncture of the trocar. Bleeding was minimal, and no problems were noted during the operation. The patient recovered soon after the operation.

The resected tumor was well circumscribed, but not encapsulated, and the surrounding tissue appeared cirrhotic. The resected specimen was diagnosed histologically as an inflammatory pseudotumor. This is the first report of inflammatory pseudotumor of the liver observed laparoscopically and resected by laparoscopic hepatectomy.

Figure 1 **A** Plain computed tomography (CT) revealed a low-density tumor in subsegment 4. **B** The tumor became high density in the early phase on dynamic CT. **C** The tumor was still high density in the delayed phase

Figure 2 Laparoscopic observation. **A** The tumor was at the edge of the liver. **B** The tissue surrounding the tumor was punctured with an electrode needle and coagulated. **C** The coagulated tissues surrounding the tumor were dissected with an ultrasonically activated scalpel. **D** The cut edge of the liver was observed

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