Spontaneous rupture of a liver hemangioma. A case report

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CASE REPORT

A 78-year-old man, with previous history of high blood pressure, came to the Emergency Department with complaints of intensive abdominal pain in the last 2 hours with no other related symptoms. Physical examination determined: blood pressure, 70/45 mmHg; heart rate, 110 bpm; superior abdominal pain with tenderness. Initial management was undertaken, and blood pressure went over to 120/70 mmHg. Lab report: hemoglobin, 12 g/dL; 84,000 platelets/µL; prothrombin activity, 84%; the rest of parameters were normal. A computer tomography (CT) scan was performed (Fig. 1). An emergency surgery was required, and two liters of hemoperitoneum were found by a right hepatic lobe's ruptured tumor with active bleeding. A right hepatectomy was undertaken. Ten units of packed red blood cells were administered to the patient. A liver failure developed progressively, the patient being exitus in the fifth postoperative day. The study of the resected tumor confirmed the diagnosis of a 12 cm liver hemangioma.

DISCUSSION

Hemangioma is the most common benign liver tumor. Spontaneous rupture of a liver hemangioma is not a usual complication but can be a dramatic event because it is associated to a 75% of mortality (1).

Only 30 similar cases have been described in the literature (2-4), being more frequent in giant hemangiomas. It is caused by an internal bleeding and a sudden increase of pressure inside the tumor. This produces an “open-book” rupture of the liver parenchyma, causing a massive hemoperitoneum (5).

The packing management in case of rupture tumors has a low rate of success, unlike packing for liver trauma, which is very effective and safe. Although liver packing can be the first measure to be taken to control bleeding, it has a high failure rate, causing re-bleeding, and high perioperative mortality. Therefore, the emergency treatment is controversial. Transarterial embolization (TAE) is not well-indicated in case of unstable patients, being the surgical approach indicated in these cases. TAE also has a very variable success rate, from 53% to 100% (4). Moreover, the most common complication is the post-embolization syndrome (85%), followed by liver failure (34-50%) and hemostasis failure (20%). In conclusion, TAE is not a harmless technique and must be selectively indicated in patients with a good liver function, acceptable coagulopathy and a permeable portal vein (3,4). So, although TAE is a less invasive technique than open surgery, hepatic resection allows a better hemostasis of the bleeding area and a longer survival.

REFERENCES


Fig. 1. Transversal section of a CT scan with intravenous contrast. It shows a hemangioma with active bleeding and hemoperitoneum.