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When the Left Got Left Behind

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To the Editor

A 32-year-old Ethiopian male with a history of chronic hepatitis B and cutaneous T-cell lymphoma refractory to chemotherapy underwent a matched sibling peripheral blood stem cell transplant. After transplantation, he was admitted for intractable nausea and vomiting, which was then complicated by bacteremia, acute renal failure, and graft vs. host disease of the gastrointestinal tract. A non-contrast computed tomography (CT) scan of the chest, abdomen, and pelvis was performed. The CT scan revealed minor pelvic ascites, a nodular shrunken liver consistent with cirrhosis, and a mass anterior to the spleen (Figure 1). He suddenly developed another episode of nausea, vomiting, and crampy abdominal pain. This was followed by 300 ml of hematemesis and 600 ml of hematochezia.

Although stable, esophagogastroduodenoscopy (EGD) revealed clotted blood in the gastric body without a source, and colonoscopy showed diffuse bleeding without an identifiable source. Tagged red blood cell scan showed bleeding in the transverse and ascending colon; however, angiography was unable to identify the source of bleeding.

Twenty-four hours later, he was taken to the operating room because of continued bleeding. An intraoperative endoscopy was performed, with diffuse bleeding observed in the stomach. Without an identifiable source and continued bleeding, the patient underwent gastrectomy and splenectomy. Intraoperatively, the unknown mass seen on CT scan was found to have a vascular supply solely from the retroperitoneum. It was adherent to the spleen and attached to the liver by a thin fibrous band. The mass was removed with the spleen and underwent pathological analysis (Figure 2a).

Gross sectioning of the mass was performed by pathology (Figure 2b). Microscopically, this revealed tissue of hepatic origin, with mild inflammation and early bridging fibrosis (Figure 2c). After surgery, the patient continued to have gastrointestinal bleeding. Despite multiple

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CONFLICT OF INTEREST

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attempts at stabilization, the patient was overcome by septicemia. At autopsy, microscopic examination of the right lobe of the liver revealed bridging fibrosis and incomplete cirrhosis (Figure 2d).

Liver tissue that is identified outside of the liver is termed as either ectopic or accessory. If a visible attachment to the “mother” liver can be identified, the ectopic liver is termed as an accessory lobe (1). Although rare, with fewer than 100 cases reported, the suspected incidence ranges from 0.24 to 0.47% (2,3). These tissues have been described in various sizes and sites, with the most common sites being attached to the gall-bladder or intra-abdominal ligaments. Functionality can vary as well, ranging from fully functioning hepatic architecture with portal triads to deranged, minimally metabolic tissue with poor vascular supply, which has been hypothesized to contribute to neoplastic transformation (3).

This patient’s accessory liver was believed to be a remnant of the left hepatic lobe. With a history of chronic hepatitis B and cirrhosis, it is assumed that the left lobe atrophied and eventually obtained its vascular supply from the retroperitoneum. This is consistent with the finding of the mass with a fibrotic band, a probable capsular remnant, attached to the remaining “mother” liver. The vast majority of reported cases have identified ectopic or accessory livers as a consequence of errors in embryologic migration (1). A thorough literature search did not find a similar presentation to the one described here, which raises the question as to whether the term accessory liver is an appropriate one.

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Figure 1. Non-contrast computed tomography scan of the abdomen. White arrow highlights the mass anterior to the spleen.

Figure 2. Case findings. (a) The unknown gross pathologic specimen removed during gastrectomy and splenectomy. (b) Gross sections of the unidentified mass. (c) Masson's trichrome stain of the unidentified mass showing liver tissue with mild inflammation and early fibrosis. (d) Masson's trichrome stain of right lobe of liver at autopsy showing cirrhosis.