

## Image of the Month

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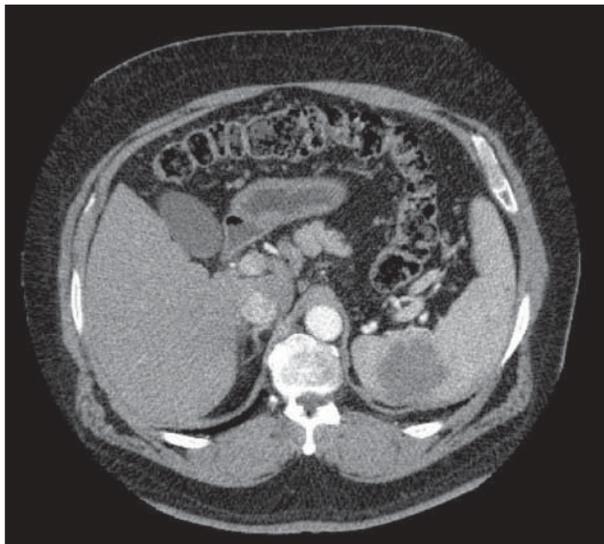
**A** 50-YEAR-OLD MAN WITH A HISTORY OF chronic hepatitis C underwent a surveillance liver computed tomography (CT) monitoring for a hepatoma, which incidentally revealed a new splenic lesion that proceeded to increase in size from  $2.4 \times 2.09$  cm to  $4.6 \times 3.7$  cm over a series of 3 CT scans in a 6-month period (**Figure 1**). Concomitantly, there was an increase in his  $\alpha$ -fetoprotein level from 46.7 ng/mL to 533.7 ng/mL (to convert to micrograms per liter, multiply by 1.0) over a 16-month period. Because of a continuing rise in  $\alpha$ -fetoprotein level, along with CT images showing an increase in size of the splenic lesion, the decision for splenectomy was agreed on with the patient. Intraoperative ultrasonography results were negative for focal liver lesions but revealed a complex hypoechoic lesion in a cephalad posterior aspect of the spleen, measuring approximately

4 cm in diameter. The resected spleen grossly contained a pale tan, firm, multinodular tumor measuring  $4.4 \times 4.3 \times 3.8$  cm. Microscopically, sections of the spleen showed involvement by neoplasm composed of medium to large cells along with extensive areas of necrosis (**Figure 2**). Immunohistochemical stains showed that the neoplastic cells were positive for CD20, CD10, and Bcl-6 and were negative for CD3, Bcl-2, Bcl-1, terminal deoxynucleotidyl transferase, CD34, synaptophysin, pan keratin, placental alkaline phosphatase, chromogranin, and  $\alpha$ -fetoprotein. The Ki-67 proliferation fraction was 80% to 90%, indicating a high-grade nature of the mass.

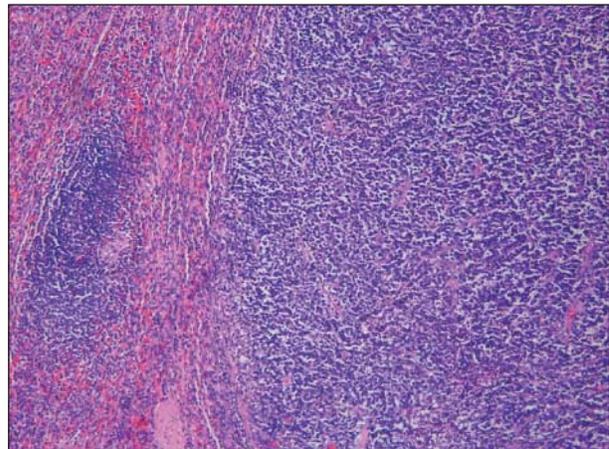
### What Is the Diagnosis?

- A. Hepatoma metastatic to the spleen
- B. Splenic hemangioma
- C. Splenic lymphoproliferative disorder
- D. Primary splenic high-grade lymphoma

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**Figure 1.** Abdominal computed tomography showing splenic mass.



**Figure 2.** Area of low-density mass (right) sharply demarcated from uninvolved splenic parenchyma (left) (hematoxylin-eosin, original magnification  $\times 100$ ).