Photo Quiz

(For answer and discussion, see page 4030 in this issue [doi:10.1128/JCM.r01134-11])

Things Are Not Always What They Appear To Be

FIG. 1. (a) Lactophenol cotton blue staining of hyphae (magnification, $\times 1,000$). (b) Hematoxylin and eosin stain of lung parenchyma (magnification, $\times 1,000$).

A 52-year-old female was admitted for a unilateral ovarian cystectomy. A preoperative chest X ray revealed a 1.5-cm by 1.0-cm by 1.0-cm peripheral nodule in her left upper lobe which had not been present on a previous chest X ray, 5 years prior. The patient appeared in good health and denied any recent pulmonary symptoms, fever, chills, or night sweats. On physical examination, the patient exhibited unremarkable results for a chest exam, with normal breath sounds bilaterally. Of note, the patient enjoyed outdoor recreational activities, including frequent hikes and camping excursions near her home in the upper peninsula of Michigan. She also trained horses at a ranch in western Texas every summer.

An excisional biopsy of the nodule was performed, and the specimen was sent for bacterial culture, fungal culture, and histological analysis. A hematoxylin and eosin stain of a frozen section demonstrated granulomas with yeast-like organisms

consistent with blastomycosis. One week following the biopsy, the fungal culture specimen grew a fluffy white mold that was glistening and adherent to the medium. Lactophenol cotton blue staining revealed fungal elements, depicted in Fig. 1a. Upon histological review of the paraffin-fixed tissue sections, multiple organisms were identified, and these organisms are depicted in Fig. 1b.

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