Photo Quiz: Skin Nodules in a Liver Transplant Recipient

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FIG 1 (A and B) Specimen from wrist. (A) Microscopic view of the lactophenol cotton blue mount of the organism. (B) Suppurative granulomatous inflammation with budding yeast-like fungal organisms on PAS stain. (C and D) Specimen from forearm. (C) Microscopic view of the lactophenol cotton blue mount of the organism. (D) Pigmented conidia in a chain on Fontana-Masson stain.

A 62-year-old man with a history of liver transplantation presented to the dermatology clinic for evaluation of a lesion on his arm. Eight months prior to presentation, he had noted a small, nonpainful, nonpruritic nodule on the extensor surface of his arm, and 2 months later, a second lesion appeared on the same side wrist. Both lesions on his forearm and wrist began as a tiny scratch and gradually grew. The growths enlarged to a 1.8-cm crusted verrucous plaque and a 1.5-cm erythematous dome-shaped nodule at the time of presentation. The patient had a history of cirrhosis secondary to hepatitis C infection and had undergone a liver transplant 3 years prior to presentation. He was on immunosuppressive therapy with tacrolimus, mycophenolate, and prednisone. The patient lived in East Texas and did not report any recent travel or have any pets. He occasionally worked outdoors in construction jobs. Biopsy specimens from the wrist and forearm were sent for histopathological evaluation, and bacterial,

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mycobacterial, and fungal tissue cultures were performed. After 4 days, the wrist sample grew out white colonies, which turned to black 3 days later. Branched sterile hyphae were seen even after subculture on potato dextrose agar (Fig. 1A). After 8 days, the forearm specimen grew tiny olive green-to-black colonies. Septate hyphae with vase-shaped phialides and oval conidia were observed (Fig. 1C). Both biopsy specimens showed pseudoepitheliomatous hyperplasia (a histopathological reaction pattern of the epidermis characterized by marked thickening and irregular elongation of the rete ridges [acanthosis], which mimics squamous cell carcinoma [pseudocarcinomatous hyperplasia]). Suppurative granulomatous inflammation with fungal organisms characterized by singular and chained narrow-based budding yeast-like forms on periodic acid-Schiff (PAS) stain (Fig. 1B) and pigmented conidia in a chain on Fontana-Masson stain (Fig. 1D) were observed as well.