Answer to Photo Quiz: *Histoplasma capsulatum* Prosthetic Valve Endocarditis with Arterial Embolism

(See page 771 in this issue [doi:10.1128/JCM.02078-10] for photo quiz case presentation)

Both the arterial embolus and the aortic valve tissue grew *Histoplasma capsulatum*. *Histoplasma* urine antigen tests performed on a specimen collected the same week as the valve replacement were negative, as were results for complement fixation antibodies. Postoperatively, the patient received approximately 2 weeks of treatment with intravenous lipid complex amphotericin B, followed by 9 months of treatment with oral itraconazole solution (200 mg twice a day for 4 months and 5 additional months of 200 mg once daily). Seven years later, the patient was physically active and without evidence of valvular dysfunction.

Fungi are the causative agents in approximately 5 to 7% of all prosthetic valve endocarditis episodes (1). *H. capsulatum* is rare; in a review of 270 cases of fungal endocarditis, only 6% were attributed to *H. capsulatum* (2). The diagnosis of *H. capsulatum* endocarditis can be difficult to establish, as routine blood cultures are usually negative for fungi and there are no pathognomonic signs or symptoms except for the remarkable chronicity of illness and reported frequent major arterial emboli. Most patients with chronic disease will have positive serum serologies, suggesting the diagnosis. Although *H. capsulatum* is a dimorphic fungus that typically grows in the yeast form in the human host, in cases of endocarditis the fungi can present in a variety of large and small yeast forms as well as with septate and branching hyphae, as was seen with the present patient (3).

Optimal treatment is unknown. Lipid complex amphotericin is considered first-line therapy. Because of his advanced age, the patient was rapidly transitioned from amphotericin to liquid itraconazole following bioprosthetic valve replacement.

REFERENCES