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Peripheral blood histoplasmosis in an immunocompetent child with disseminated disease

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A 15-year-old female from Uttar Pradesh, India presented to pediatric emergency unit with bilateral joint pain, breathlessness, multiple necrotic skin lesions, and a six-month history of intermittent fever. On examination, she had multiple maculopapular lesions over her whole body and hepatosplenomegaly. Earlier investigations revealed pancytopenia. We considered a clinical diagnosis of lupus. Complete blood count showed hemoglobin 8.5 g/dL, total leucocyte count was 2,220/µL, platelets were 108,000/µL, and the absolute neutrophil count was 1,887/µL. The peripheral blood smear revealed occasional monocytic-macrophage lineage cells with engulfed yeast-like forms of *Histoplasma capsulatum* (Fig. 1A, MGG, ×100; inset-a, ×40). Bone marrow biopsy showed increased plasma cells and histiocytes with many intracellular and extracellular forms of the fungus (arrow) (Fig. 1B, H&E stain, ×40). Occasional loose clusters of epithelioid histiocytes and foreign body giant cells were noted. Inset (Fig. 1b, ×40) shows fungus on the Gomori methenamine silver stain. The fungus was obtained from skin scraping. She was immediately started on amphotericin B and itraconazole. The immunological workup showed elevated IgG and a normal CD4: CD8 ratio. The workup for chronic granulomatous disease and HIV was negative. Despite dual antifungal therapy she succumbed to disseminated disease. Finding circulating fungal forms is a rare ominous event, especially in immunocompetent hosts.

**Author’s Disclosures of Potential Conflict of interest**

No potential conflicts of interest relevant to this article were reported.