

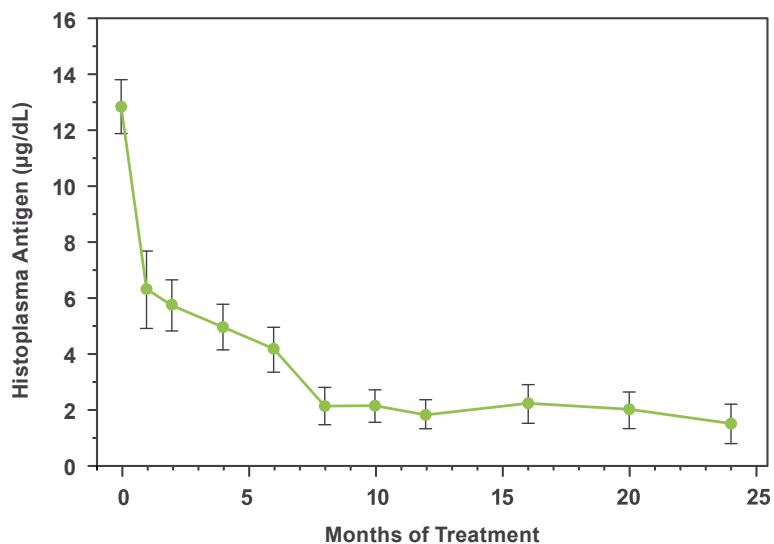


## Disseminated histoplasmosis Complicating TNF Blocker Therapy

**CASE REPORT:** A patient with rheumatoid arthritis, treated with infliximab, presented with disseminated histoplasmosis diagnosed by antigen detection, at concentration of 9.5 µg/mL in the urine. The patient responded to itraconazole and did well for nearly one year at which time recurrent fever and cervical lymphadenopathy prompted evaluation for possible relapse of histoplasmosis. The patient was adherent to therapy, documented by therapeutic itraconazole concentrations in the serum. Biopsy of the lymph node showed granulomatous inflammation and yeast resembling *Histoplasma capsulatum*, but fungal cultures were negative, as was antigen in the urine. The clinical findings were attributed to immune reconstitution inflammatory syndrome (IRIS) <sup>1</sup> rather than relapse and resolved with the addition of corticosteroids without changing antifungal therapy.

**DISCUSSION:** A multicenter study of 98 patients with histoplasmosis complicating TNF blocker therapy was recently published <sup>2</sup> [Histoplasmosis Complicating Tumor Necrosis Factor-α Blocker Therapy: A Retrospective Analysis of 98 Cases.]. Detection of antigen in the urine and/or serum was the most sensitive method for diagnosis, positive in 88% of cases. Antigen concentration also was a useful biomarker for severe disease and for monitoring the effectiveness of treatment (Figure). Initiation of antifungal therapy and discontinuation of the TNF blocker was effective in all patients but 3 patients relapsed, during which 1 died. About 10% of patients experienced findings consistent with IRIS, which often were confused with relapse. About one-third of patients resumed TNF blocker therapy, with or without continued antifungal therapy. Continued vigilance and follow-up antigen testing is important to identify relapse promptly.

**Histoplasma Antigen Monitoring to Determine Treatment Efficacy**



### REFERENCES

- (1) Gupta, AO and Singh, N. Immune reconstitution syndrome and fungal infections. *Curr Opin Infect Dis.* 2011; 24:527-533.
- (2) Vergidis, P, Avery, RK, Wheat, LJ, et al. Histoplasmosis Complicating Tumor Necrosis Factor-alpha Blocker Therapy: A Retrospective Analysis of 98 Cases. *Clin Infect Dis.* 2015; 61:409-417.