A Case of Cryptococcal Meningoencephalitis Mimicking Lupus Psychosis

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A forty-year-old woman presented with dizziness for 1 month. She was diagnosed as lupus nephritis (International Society of Nephrology/Renal Pathology Society [ISN/RPS] class III active) and hemolytic anemia 2 months ago at another hospital and treated with oral prednisolone 60 mg and hydroxychloroquine. After she was discharged, her speech and behavior became retarded but she had neither fever nor headache. Probable diagnosis of lupus psychosis was additively made, she was readmitted for intravenous cyclophosphamide pulse therapy and oral clozapine, diazepam were co-administered along with prednisolone, then she was discharged. Ten days later she visited our emergency medicine with drowsy mental status and dizziness with stable vital signs. Laboratory findings showed positive results of antinuclear (1:160, speckled), anti-DNA (1:20), anti-smith, anti-RNP, and anti-Ro antibody, normal levels of C3 and C4, and negative results for lupus anticoagulant, anti-cardiolipin immunoglobulin (Ig)G/M, anti-beta2 glycoprotein IgG/M and anti-human immunodeficiency virus antibody. Opening pressure of lumbar puncture was 50 cm H₂O and initial cerebrospinal fluid (CSF) revealed 173 white blood cells with 81% polymorphonuclear cells, protein of 285 mg/dL and glucose of 2 mg/dL and CSF cryptococcal antigen was positive. Brain magnetic resonance imaging showed focal enhancement in areas near basal cistern and perimesencephalic cistern, suggesting meningitis (Figure 1A). Intravenous ceftriaxone, vancomycin, and acyclovir and oral sulfamethoxazole/trimethoprim were administered for empirical treatment of unspecified meningitis. The pathology result reported on the 3rd hospital day revealed many round, irregularly sized yeasts with thick capsules, several with...
budding forms which were positive with India ink preparation (Figure 1B), and all positive for stains with Periodic acid-Schiff (PAS), Grocott-Gomori’s methenamine silver (GMS) and mucicarmine. Intravenous amphotericin was started but fluconazole or flucytosine could not be combined because of high cost and elevated liver enzymes. CSF cryptococcal culture showed isolated *Cryptococcus neoformans*. Despite the antifungal therapy, patient’s mental status and overall clinical course went downward, she expired on the 16th hospital day.

**CONFLICT OF INTEREST**

No potential conflict of interest relevant to this article was reported.