

## Case # 1988-3

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## Clinical Abstract:

This was a 36 year old male with a history of intravenous drug use. The patient was well until two weeks prior to admission when he began to have headache associated with some nausea, vomiting and altered mental status. Over the next two weeks he developed fever, night sweats without chills and his mental status continued to deteriorate. The day prior to admission he became combative and hostile. On the morning of admission he fell and hit his head on a radiator without loss of consciousness. His wife stated that he had been short of breath for approximately one week. Past history was significant for untreated moderate hypertension. He had been incarcerated in prison for four years until three weeks prior to admission.

Physical examination revealed generalized lymphadenopathy, oral candidiasis, nuchal rigidity, stupor and hyperreflexia with no focal neurologic signs. Lumbar puncture showed opening pressure 48 mm, cells 85(89% L, 5% P, 3% M), glucose 24, protein 121, lactate 3.8, gram stain-negative, India ink-budding yeast and cryptococcal antigen titer 1:1024. Blood culture was positive for yeast. Serum antibody test for HIV-1(Elisa) was found to be positive three weeks after admission. A CT scan of the head was negative. The patient was treated with Amphotericin B and Fluocytosine for ten weeks and was discharged when his condition improved.

He was readmitted 8 days after discharge with confusion, considerable recent weight loss, fever (101° F) and chills, also complaining of muscle weakness. On neurological examination the patient was confused and was only oriented to person and place. Level of consciousness was poor. Reflexes were 3+ in upper and lower extremities. White blood cell count on admission was 3600. Lumbar puncture revealed 3 polys, 2 RBCs, protein 77, glucose 39, lactate 2.2 and CSF cryptococcal antigen titer > 1:1024. CT scan on the night of admission showed mild, generalized cerebral atrophy. No focal lesions were seen. Once again the patient was treated with Amphotericin B. His mental status waxed and waned during his hospital stay. He became comatose and was found apneic and pulseless on the 26th hospital day. Resuscitative efforts were unsuccessful.

Material submitted: One H&E and one unstained slide of cerebrum

Points for discussion: 1. Diagnosis  
2. Pathogenesis