An unusual clinical presentation of Cryptococcal infection in a post renal transplant patient

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Background - Cryptococcosis is a severe fungal infection with a high mortality rate among solid organ transplant recipients. The infection usually involves the lungs, the central nervous system as well as the skin, the bones and the urinary tract.

CASE
A 40 year old man underwent renal transplantation 6 years before. He presented with early morning severe headache with nausea, slurring of speech and unsteadiness of walk for 2 weeks duration. He also had recurrent presyncopal episodes and managed as diabetic autonomic neuropathy. He denied history of fever. His medical history includes new onset Diabetes after renal transplantation. He had been taking oral Prednisolone, Ciclosporin, Mycophenolic acid and oral Gliclazide.
On examination he had some Cushinoid features and dilated superficial veins in the chest and neck. His Pembertan sign was positive. Fundi revealed Grade 11 hypertensive retinopathy. Laboratory investigations revealed Serum creatinine 2.9mg/dl with baseline serum creatinine-1.6mg/dl 6 months before. Chest Xray revealed coin lesion in the right middle lobe and HRCT revealed right lung mass with bilateral lung nodules and mediastinal lymphadenopathy. ESR-100mm/1st hour, WBC-8600, Plt-229000, Hb-9.5g/dl, Blood culture and ABST-yeasts isolated with Indian ink stain weakly positive, Serum for Cryptococcal antigen positive, CSF Full report-Glu-42mg/dl, prot-102mg/dl, WCC-50, Neu-20%, Lym-80%, Cryptococcal antigen-positive. We have treated him with Intravenous liposomal Amphotericin B (5mg/kg/day in 5% Dextrose for first 2 weeks followed by Oral Fluconazole 800mg/day for 8 weeks and by oral Fluconazole 400mg/day for 6 months. We have corrected hypokalemia and adequately hydrated with normal saline during Amphotericin treatment. We couldn't treat him with Intravenous Flucytosine initially as it was unavailable in Srilanka. Patient’s symptoms recovered fully within first 2 weeks of the treatment and his repeat lumbar puncture test, performed after 2 weeks was completely negative.

Discussion
Cryptococcosis remains a significant opportunistic infection in solid organ transplant recipients. As transplant recipients receive potent immunosuppressive agents has led to immune reconstitution inflammatory syndrome as a growing complication. A total of 53%-72% of cases of cryptococcal disease among solid organ transplant recipients are disseminated or involve the CNS. Overall 61% of the SOT recipients had disseminated disease, 54% had pulmonary disease, and 8.1% had skin, soft tissue or osteoarticular cryptococcosis.
All immunocompromised patients need complete evaluation, including collection of CSF, blood and urinanalysis.

Conclusions- The main learning point of this case presentation is good history and proper clinical examination is very important in a immunocompromised patient to make the correct diagnosis. When a
patient presented with presyncopal episodes it should not be misdiagnosed as diabetic autonomic neuropathy without doing proper clinical examination.

Abbreviations-SOT(solid organ transplantation), CSF(Cerebro spinal fluid), ESR (erythrocyte sedimentation rate)

CNS(Central nervous system)

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