Generalised Osteolytic Lesions in an HIV Positive Male with Tuberculosis and Toxoplasmosis: A Rare Case Report

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INTRODUCTION:
Osteolytic lesions of the skull are an unusual complication in patients with AIDS. Other important causes are multiple myeloma, secondary metastasis and bacterial osteomyelitis. In healthy humans, the infection with T. gondii is usually asymptomatic, but it can be fatal in the immunocompromised individuals, such as HIV/AIDS patients. Tuberculous meningitis and cerebral toxoplasmosis can coexist and should be considered in the background of HIV infection.

A rare case of toxoplasmosis with tuberculosis presenting as multiple osteolytic bony lesions in a middle aged HIV positive male is reported here.

CASE DETAIL:
A 33 year old male patient was admitted to our hospital with fever and low backache since 15 days. He complained of altered sensorium since last 3 days. The patient had also developed convulsions on the day of admission and was not able to see from his right eye. He was driver by occupation and there was no significant family or past history. On examination he was cachexic, drowsy and disoriented with pulse-92/min, respiratory rate- 18 /min and BP of 110/70mmHg. His plantars were normal, deep tendon reflexes were present. He was moving all 4 limbs but was unable to grasp objects with left hand.

His tongue showed whitish patch suggestive of oral candidiasis. He also had black pigmented patches over both the lower limbs(Fig.1) and typical sternal tenderness.

His investigations revealed osteolytic lesions on the skull (Fig.2), clavicle(Fig.3) and also on the hip bone(Fig.4). His Hb-13.1g%, TLC - 33580/mm , platelet -1.03lac/mm , rest blood indices and peripheral smears were normal. He was found to be reactive to HIV-1. His kidney function test, Sr. Uric acid level, Sr. calcium and Sr. parathormone level were normal. His protein electrophoresis revealed gamma globulin spike of 3.7; but no M spike. Beta 2 microglobulin was also high. Bence-jones proteins were absent in 24 hrs urine and his erythrocyte sedimentation rate was 16. His bone marrow aspirate revealed a dry tap and biopsy of the same showed 6% plasmacytosis. His CSF examination showed raised proteins and an ADA level of 6.42 for which he was put on AKT empirically although CSF CBNAAT was negative for M. tuberculosis. His CD4 count was 103 for which ART was started along with T. Cotrimoxazole and antifungal drug as a prophylactic measure. His VDRL test was negative and MRI brain showed multiple cerebral subcortical white matter lesions with gangliocapsular and brain stem & cerebellar involvement suggestive of progressive multifocal leukoencephalopathy; multiple skull lesions with dural enhancement& frontal sinus nodular lesions most likely suggestive of lymphoma ?tuberculosis ?kaposi’s sarcoma ? toxoplasmosis ? cryptococcal infection. After treatment for about 1 month, his MRI brain was repeated and it showed multiple focal hyperintense lesions in the periventricular white matter and basal ganglia on T2W images and hypointense on T1W images with subtle contrast enhancement and diffusion restriction (Fig.5) suggestive of ?Disseminated Tuberculosis?CNS toxoplasmosis which was further retrospectively confirmed with serology. His serum levels of IgG was significantly high- 650.0 (Positive> 1.1) and of IgM was 0.672 (Positive- > or = 0.6). The CD4 count had Improved to 163. Later after taking written informed consent, a biopsy of osteolytic lesion from clavicle was performed and it turned out to be negative for CBNAAT, which was partly attributed to the prolonged course of treatment. Thus a diagnosis of toxoplasmosis with disseminated kochs with HIV was made.

Fig. 1 Photograph showing black pigmented patches over leg.

Fig. 2 Xray skull showing multiple osteolytic lesions.

Fig. 3 Chest Xray showing osteolytic lesion in right clavicle from where biopsy was taken.
REFERENCES: