A CASE OF HIV PRESENTING WITH RARE COMPLICATION OF TOXOPLASMA GONDII INFECTION: A CASE REPORT

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Introduction

Toxoplasma gondii is an obligate intracellular protozoan parasite presenting as a zoonotic infection distributed worldwide. In HIVpositive individuals, it causes severe opportunistic infections, which is of major public health concern as it results in physical and psychological disabilities. In healthy immunocompetent individuals, it causes asymptomatic chronic persistent infections, but in immunosuppressed patients, there is reactivation of the parasite if the CD4 counts fall below 200 cells/µl. The seroprevalence rates are variable in different geographic areas. The tissue cyst or oocyst is the infective form which enters by ingestion of contaminated meat and transform into tachyzoites and disseminate into blood stream. In immunocompetent persons due to cell-mediated immunity the parasite is transformed into tissue cyst resulting in life long chronic infection. In HIV-infected people opportunistic infection by *T. gondii* occurs due to depletion of CD4 cells, decreased production of cytokines and interferon gamma and impaired cytotoxic T-lymphocyte activity resulting in reactivation of latent infection. The diagnosis can be done by clinical, serological, radiological, histological or molecular methods, or by the combination of these.

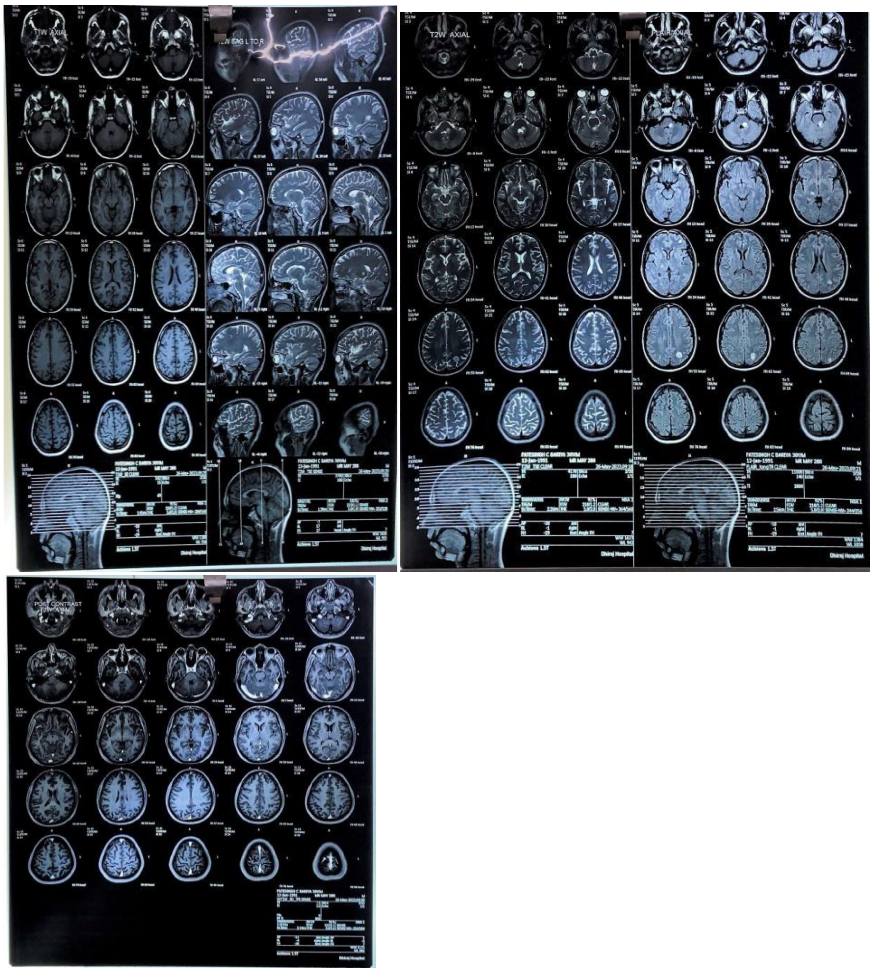
Casereport

36 year / male with TB detected sixth months back took 6 months of complete AKT treatment , Recently diagnosed as HIV positive status presented with complain of headache and giddiness since last 15 days . Patient was asymptomatic 15 days ago when he developed acute onset giddiness with blurring of vision and swaying to left side while walking . Pt had history of fever 15 days back which was low grade lasting for 2 to 3 hours with 2 spikes per day

On examination patient was
Temp afebrile at presentation
Pulse 90 / min regular, BP 110/70 mm hg . RS – BLAE air entry present with crepts present in basal zones , CVS – s1s2 heard no murmur , PA – Soft non tender
CNS –
Pupil – Unequal reactive to light
Planter – B/L Flexor
Tone / Power – Normal
Reflexes – Plus one reflexes in b/l upper limb and lower limb At the time of presentation patient had an hb of 11 mg /dl with Tc of 6620 and Platelets were 1.81 , Creatinine was 0.82 and SGPT was 22.4 Serum electrolytes 149/4.9/103USG AP was done which showed – Liver of size 14 cm and Rk of size 8.6 x 4.6 and lK of size 8.8 x 4.5 cm and gall bladder had Gb Polyp

CSF analysis –
Fluid sugar 48 , protein 96 , albumin - , ADA 92 , LDH 49 Total count 2 in which lymphocytes were 100

MRI BRAIN –
Altered signal intensity in bilateral cerebral hemisphere predominantly in subcortical regions involving left frontal, left parietal and left middle cerebellar peduncle and right thalmus which appered hyperintense on T2 and FLAIR and appered bright on DWI with no corresponding drop in ADC and no blooming on GRE Multivoxel spectroscopy shows increased choline and increase NAA. with lipid lactate peaks.
We performed toxoplasma IgG antibody test which came out to be positive.
Patient was initially startedon inj CEFTRIAXONE 2 gm iv 12 hrly and inj ACYCLOVIR 500 mg iv 8 hrly and later inj VANCOMYCIN 1 gm iv 12 hrly but patient had no clinical improvement after toxoplasma IgG test Tab SEPTRAN - DS was added and patient gradually improved. Patients AKT was stopped and discharged and was called back after 15 days for follow up on successive visit AKT was restarted again.



Discussion-

Toxoplasmosis has historically been considered one of the most important opportunistic infection (1).Central nervous system toxoplasmosis is an important infectious complication of AIDS and requires prolonged treatment . Most cases occur in patients with serologic evidence of prior exposure and therefore appear to result from reactivation of a previously acquired infection . Antibody to toxoplasma gondii was found in 130 out of 411 patients with AIDS (32%) , CNS toxoplasmosis developed in 31 (24%) , By survival analysis , the estimated probability of ever developing CNS infection in antibody positive individual was 28 % within 2 years of infection (2). The most common presentation in about 75 % of cases is a subacute episode of focal neurological abnormalities' such as hemiplegia , personality changes and aphasia (3) . Cerebral toxoplasmosis is the most common cause of expansive brain lesion in people living with HIV/AIDS and continues to cause high morbidity and mortality in people living with HIV /AIDS . Early initiation of antitoxoplasma therapy is an important feature of the diagnostic approach of expansive brain lesion in PLWHA . Pyrimethamine based regimens and TMP - SMX present similar efficacy , TMP – SMX show practical shows potential practical advantages . The immune reconstitution syndrome is uncommon in cerebral toxoplasmosis and we have a more effective, safe and friendly combined antiretroviral option.(4)

References

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