

Tuberculoma in Pregnancy: A Rare Cause of Convulsions during Pregnancy, Near Miss Case

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Abstract

Tuberculoma in Pregnancy of Early diagnosis requires a high index of suspicion, especially in pregnant patients. CSF cytology and biochemical analysis along with ADA gives valuable clue to the diagnosis. CT or MRI is useful in finding out tubercular CNS involvement.

Keywords: Tuberculoma; Pregnancy; CNS

Background

Although, Tuberculosis is a common infection in developing countries. Only 1% of these cases develop CNS tuberculosis. Between 1910 and 1931, 34% of intracranial masses in the USA and Europe were reported as tuberculomas but later the ratio fell to less than 4%. In developing countries tuberculomas still constitute about one-third of intracranial masses. Intracranial Tuberculomas are usually solitary lesions, but 15 - 34% are multiple [1]. Multiple central nervous system (CNS) tuberculomas in an immunocompetent patient may closely resemble metastatic malignancy [2]. Tuberculoma is common in endemic areas but its occurrence during pregnancy is occasional and of particular interest is its intriguing clinical picture mimicking toxemia of pregnancy and brain tumor. In addition, the effects of pregnancy on tuberculosis or vice versa have been controversial.

Clinical Description

Twenty-four years old patient, had two normal delivery, presented at her second pregnancy at nineteen weeks with tonic clonic seizures this was on April 26 this year, had recurrent seizures, she was admitted to high dependency unit managed initially as eclampsia with magnesium sulphate and simultaneously investigated thoroughly for possible causes, MRI showed granulomatous lesion on the temporal lobe of the brain, suggestive of possible tuberculosis. infectious diseases team was involved and planned to start ant tuberculous treatment (rifampicin, ethambutol, pyridoxine) with intravenous dexamethasone, pyrazinamide free formula. Neurosurgery team decided on biopsy. Multidisciplinary Team meeting was held to discuss the case and formulate plan of management, investigations for tuberculosis were negative, chest X-ray was unremarkable, thus the meeting agreed on excisional biopsy. On May 02, excisional biopsy was done. Patient was discharged in good general condition on anti-tuberculous, anti-epileptic and progesterone suppositories. Plan of follow up and registration in the tuberculosis registry performed. pregnancy continued uneventfully. Had a spontaneous delivery at 39 weeks of gestation without complications. On follow up with TB program.

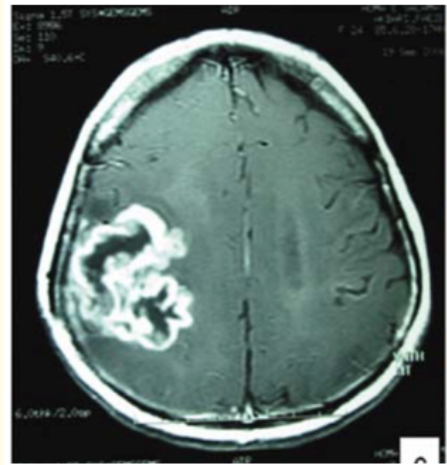


Figure 1

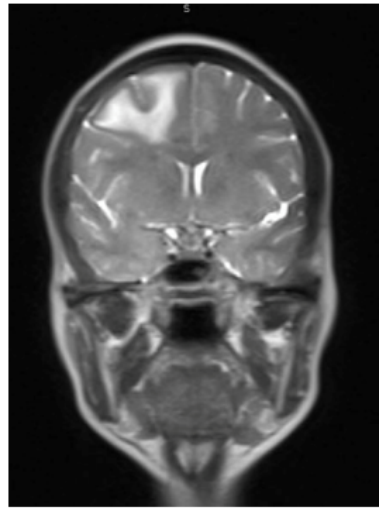


Figure 2

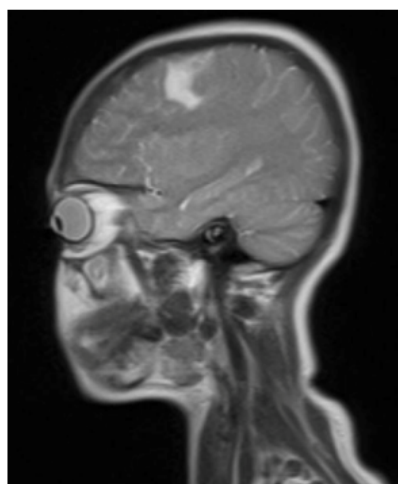


Figure 3

Discussion

CNS tuberculosis is a serious but treatable disorder with protean manifestations. Early diagnosis requires a high index of suspicion, especially in pregnant patients. CSF cytology and biochemical analysis along with ADA gives valuable clue to the diagnosis. CT or MRI is useful in finding out tubercular CNS involvement. Clinical outcome depends greatly on the stage of disease at which therapy is initiated. Timely and appropriate initiation of treatment may have a favorable pregnancy outcome, as we could achieve in our case.

Occurrence of eclampsia before 20 weeks of pregnancy and after 48 hours of delivery in the absence of typical signs of hypertension and or proteinuria is termed as atypical eclampsia. Atypical or non-classic eclampsia will have some symptoms of eclampsia but without the usual proteinuria or hypertension. All patients with atypical onset should undergo neurological evaluation to rule out neurologic causes of seizures. Cerebral tuberculosis is a rare and serious form of disease secondary to haematogenous spread of *Mycobacterium tuberculosis*. Here we present a case of cerebral tuberculoma with seizures in mid pregnancy mimicking eclampsia.

Diagnosis of tuberculosis in pregnancy may be challenging, as the symptoms like lassitude, loss of appetite, nausea, vomiting and mild grade of fever, may initially be ascribed to the pregnancy, and the normal weight gain in pregnancy may temporarily mask the associated weight loss [3]. Obstetric complications of TB include spontaneous abortion, preterm labour, low birth weight, and increased neonatal mortality [4].

Conclusion

Successful maternal outcome necessitates proper diagnosis and prompt management by multidisciplinary team. In addition to follow up specially in such cases, social and familial implications of the disease needed to be elicited.

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