Letters to Editor

Postpartum seizures
due to tuberculoma in brain

Sir,

Tuberculoma during pregnancy is an uncommon clinical entity. Various approaches are required for its diagnosis and treatment. Seizures in peripartal period are due to eclampsia, unless proved otherwise. A 23-year-old primigravida with 38 weeks of gestation was admitted with a history of fever and cough for 6 days. Evaluation included full blood counts and chest X-ray for lower respiratory tract infection. Her antenatal history and examination were otherwise insignificant. She underwent an emergency lower segment cesarean section for nonreassuring fetal status. She was administered 2.0 mL of 0.5% bupivacaine (heavy) and she delivered a healthy 2.8 kg male baby. Eight hours after surgery, the patient had generalized tonic clonic seizures, which were treated with lorazepam 4 mg stat and phenytoin 300 mg over 10 min, both given intravenously. Her airway was maintained and oxygen was given through simple face mask. Seizures subsided, but the patient remained irritable and improved gradually.

Magnetic resonance imaging (MRI) of brain revealed numerous small rounded enhancing intra axial lesions measuring around 3-5 mm, which were distributed...
throughout the brain parenchyma, suggesting tuberculomas [Figure 1]. Her tuberculin skin test was strongly positive (17 mm). Her cerebrospinal fluid (CSF) analysis showed elevated protein level of 58 mg/dL and white blood cell count was 200 cells/cubic mm, with 92% lymphocytes. Her CSF adenosine de aminase (ADA) levels were elevated (14.8 U/L) and polymerase chain reaction (PCR) was positive for mycobacterium tubercular Bacilli. Chest X-ray showed collapse of right upper lobe, suspected to be of tuberculosis [Figure 2]. Seizures due to tuberculomas were diagnosed. Antitubercular treatment was started and she improved over next one week.

Seizures in the peripartum period are due to eclampsia, unless proved otherwise. [1] Eclampsia is diagnosed as new onset of seizures in patient with preeclampsia. About 16% of eclamptic patients do not have history of preeclampsia. [2] Late postpartum eclampsia could be considered for seizures after 48 h up to 6 weeks. There are other, relatively uncommon causes of seizures such as preexisting epilepsy, cerebrovascular accidents, brain tumors, congenital brain defects, trauma, cerebral venous thrombosis, and neurocysticercosis.

Tuberculoma can be single or multiple lesions and can vary from less than a centimeter to several centimeters in diameters. [3] Patients can be asymptomatic or can have constitutional symptoms such as fever, headache and nausea. Seizures are commonest presentation of tuberculoma. [4] MRI is useful tool in evaluating the cause of seizures. In the present case, CSF examination revealed high protein and leukocytosis and along with PCR and ADA levels helped to diagnose central nervous system (CNS) tuberculosis. Tubercular skin test was strongly positive in our patient even though it may not be ideal to diagnose, as only 10-50% patients with CNS tuberculosis are positive. [4] Tuberculoma accounts for 5% of extra pulmonary tuberculosis. Pregnancy is a predisposing factor for development of tuberculoma. [5] Pregnant patient having seizures with cough, possibility of tuberculoma should be entertained.

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References
1. Sibai BM. Eclampsia. VI. Maternal-perinatal outcome in 254 consecutive cases. Am J Obstet Gynecol 1990;163:1049-54.
2. Mattar F, Sibai BM. Eclampsia. VIII. Risk factors for maternal morbidity. Am J Obstet Gynecol 2000;182:307-12.
3. Gandhi R, Prabhakar H. Emergency caesarean section in a patient with intra cerebral tuberculoma. Indian J Anaesth 2007;51:244-6.
4. Thwaites G, Fisher M, Hemingway C, Scott G, Solomon T, Innes J, et al. British Infection Society guidelines for the diagnosis and treatment of tuberculosis of the central nervous system in adults and children. J Infect 2009;59:167-87.
5. Wasay M, Moolani MK, Zaheer J, Kheleani BA, Smego RA, Sarwari RA. Prognostic indicators in patients with intracranial tuberculoma: A review of 102 cases. J Pak Med Assoc 2004;54:83-7.