Typhoid associated encephalopathy - A case report and Review of Literature

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Abstract

Typhoid fever, a bacterial infection caused by *Salmonella typhi* or *S. paratyphi*, remains a major health problem in developing countries worldwide, with an increased incidence in Asia. Encephalopathy, although a rare complication of typhoid fever, is associated with high mortality. We report a case of salmonella typhoid encephalopathy with prompt response to high dose steroids.

A 21-year-old Indian nationality, presented with 2 weeks of fever, diarrhoea and abdominal pain. He was treated as septic shock requiring ICU admission. His platelets dropped to 17 x10⁹/L in the absence of leucocytosis. Blood cultures grew *Salmonella typhi*, of which he was commenced on intravenous Ceftriaxone 2 grams twice daily. His fever settled on day 6 of Ceftriaxone, but he developed acute confusional state. He was given intravenous Dexamethasone 3mg/kg stat followed by 1 mg/kg 6 hourly for 2 days, treating as typhoid encephalopathy. His mental state improved remarkably the next day. Reports have shown that neurological complications can occur several days after antibiotics therapy as a result of endotoxin released caused by bacterial lysis. High dose steroids have been associated with reduced mortality in small studies. Thus in severe typhoid fever with evidence of encephalopathy, it is recommended to start high dose steroids as adjunctive therapy to reduced mortality and morbidity. Early recognition and prompt management of typhoid associated encephalopathy can lead to improved morbidity and mortality.

**Keywords**: Salmonella Typhoid, Salmonellosis, typhoid encephalopathy, high dose steroids

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