

Acute Reversible Cerebellar Ataxia in Typhoid Fever

Five to 35% of individuals with typhoid fever experience neurological complications; encephalopathy being the most common abnormality(1). Acute cerebellar ataxia as an isolated neurological complication is certainly rare barring a few case reports in the literature.

An eleven years old boy was admitted with high grade pyrexia of one week's duration. Consultation was sought because of gait abnormality. Examination revealed a toxic and febrile child, who had intention tremor, wide based gait, hypotonia and pendular knee jerks. Sensorium was normal. Nystagmus was conspicuous by its absence. Blood culture grew *Salmonella typhi* sensitive to co-trimoxazole and chloramphenicol. Widal test showed a titre of 1/320 against 'O' and 'H' antigens, with a repeat widal one week later showing a rising titre of 1/640 against 'O' and 'H' antigens. Cerebrospinal fluid examination and computed tomography study of the brain were normal. Co-trimoxazole by intravenous route was started initially which was later changed to the oral route. A complete course of two weeks therapy was given. Fever subsided by day five and ataxia and inco-ordination disappeared by two weeks after start of therapy. Six months follow up did not reveal any neurological sequelae.

A para- or post-infectious demyelinating process has been suggested as a possible pathogenesis of this acute, reversible cerebellar ataxia(2). Contributions may also be due to toxemia, hyperpyrexia and metabolic disturbances. Cerebellar ataxia was shown to be present in 2.3% of cases of typhoid fever in one series, majority of which recovered within one month(3). At least eight well documented cases of similar nature have been reported from India(4).

Because of its rarity and very good prognosis with appropriate treatment of the underlying salmonella septicemia, entity should always be kept in mind while treating a febrile patient with signs of acute cerebellar ataxia.

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