

## Subacute Sclerosing Panencephalitis (SSPE) - due to Lack of Complete Immunization?

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Madam, We report the case of a eight years old boy Shakirullah s/o Jamshed, weight 20 kg resident of Banaras, Karachi. The child was previously healthy.

The patient history was suggestive of measles infection during early childhood and mother was not sure of the vaccination status. Mother had Tuberculosis and she was on Anti Tuberculous Therapy (ATT). There was no family history of fits.

The child was admitted in the paediatric department with complaints of fits for one month and altered level of consciousness for two days prior to admission. Mother had also noticed changes in behaviour for one month. He became unusually frightened when he was alone and in a dark room. Fits were not controlled for two days when he came to Abbasi Shaheed hospital and child became drowsy. He was shifted to Paediatric Intensive Care Unit (PICU), Paediatric Unit II, Abbasi Shaheed Hospital.

General physical examination revealed the patient is in a vegetative state<sup>1</sup>. His neurological examination revealed a child not oriented with time, place and person. Glasgow Coma Scale (GCS)<sup>1</sup> was 7/15. (Eye opening (E3) Motor response (M2), Verbal response (V2) were present. Released reflexes were present (snout reflex, palmo-mental reflex, grasp reflex). Cranial Nerves (CN) that were

examined included CN3; Oculomotor Nerve, CN4; Trochlear Nerve, CN5; Trigeminal Nerve, CN6; Abducent Nerve, CN8; Auditory Nerve, CN9; Glossopharyngeal Nerve and CN12; Hypoglossal Nerve. Patient was not able to perceive even hands movements or a beam of light. Fundoscopy showed pale disc bilaterally. There was generalized spastic hypertonia. Power was 2/5 in all limbs. All deep tendon reflexes were brisk. Plantar reflex was up going bilaterally. Myoclonic jerks were present. Primary sensations were intact. Cerebellar signs was not appreciable. Signs of meningeal irritation were absent.

Laboratory workup including complete blood count (CBC), blood culture didn't reveal any abnormality. A possibility of encephalitis was considered and he was treated accordingly.

Urine culture showed Escherichia Coli after 15 days of admission and was treated according to sensitivity. Cerebrospinal fluid examination did not reveal any abnormality. Computed Tomography scan brain and Magnetic Resonance Imaging of brain was normal. Magnetic Resonance Angiography of brain conducted was normal. Anti tuberculus treatment was also started based on the history.

He had frequent bouts of hyperpyrexia and myoclonic jerks. Electroencephalography was performed that showed bursts-suppressions and cerebrospinal fluid examination was re-conducted that was positive for dark brown measles specific oligoclonal bands<sup>2,3,4</sup>, suggesting SSPE.

In the next 2 weeks fever subsided and fits were controlled. GCS became better. But child still continued to have myoclonic jerks, spasticity and abnormal posture but stable autonomic system.

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Parents were counselled about the prognosis and advised about general nursing care. Child was discharged on anti-convulsant and multivitamins.

Though SSPE has been frequently reported in literature<sup>5</sup>, this patient has been discussed, as a letter to Editor as a strong family history of tuberculosis was present and the child had been in contact with the mother for some time, however, first CSF had not been sent initially for oligoclonal bands. When child did not improve, repeat CSF was done with special request for oligoclonal bands, which were found to be positive and suggestive of SSPE. Hence, SSPE as a differential diagnosis should be suspected in a child presenting as described and the immunization card of all children should be seen and confirmed prior to labeling whether immunization is complete or not especially in hesitant parents

## References

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