

the efficacy of the insulin regimen and diabetes control.

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## Subacute Sclerosing Panencephalitis With Tics as First Symptom

A 10-year-old boy presented with complex tics involving shoulder and facial muscles since five months. Tics were insidious in onset, gradually progressive, changing in type and location, suppressed with effort. He suffered from measles at two years of age. Examination revealed stereotypic repetitive movements and bradykinesia. The initial provisional diagnosis was Tic disorder of childhood. After two weeks he developed spontaneous periodic generalised myoclonus followed by ataxia, progressive slurring of speech and decreased speech volume. Investigations showed normal complete hemogram, ESR, ASO titre, anti-nuclear factor, liver function test, serum electrolytes, copper, ceruloplasmin, parathyroid hormone and lactic acid levels. Nerve conduction studies, electromyography, axillary skin and muscle biopsy reports were normal. Computed tomography scan and magnetic resonance imaging (MRI) of the brain were normal. However, electroencephalography showed periodic generalised bursts of high-amplitude and slow wave complexes recurring at intervals of 6-8 seconds. Cerebrospinal fluid study revealed IgG measles 376.11 U/L (dilution 1:4) and serum IgG measles 329.09 U/L (dilution 1:404) by ELISA. Serum anti-measles antibody titre (5.22RFV) were elevated above normal range (>0.7RFV) by ELFA. Blood and CSF serology for Herpes simplex, Toxoplasma and Cytomegalovirus were all negative (both IgM and IgG). He was treated with Isoprinosine (100mg/kg/day) but therapy with interferon remained

unaffordable. Sodium valproate and clonazepam were added for control of myoclonus. Improvement in seizure control and tics were noted after six months of continuous follow up. Repeat MRI showed focal areas of hyperintensities in cortex and subcortical white matter of both frontal and adjacent high parietal region in T<sub>2</sub> weighted FSE and FLAIR image after two years of follow up.

Myoclonus is brief, involuntary twitching of a muscle or group of muscles, may be mistaken as tics and has been described with SSPE [1]. Tics are characterized by abrupt, repetitive movements, commonly preceded by premonitory sensation of an urge and can be suppressed with effort [2]. Tourette syndrome is most frequent cause of tics, others are insults to the brain; particularly the basal ganglia, infection, stroke, head trauma, certain toxins, drugs and various sporadic, genetic, neurodegenerative disorders [2]. Differential diagnosis of childhood cognitive deterioration and movement disorders like Wilsons disease, childhood systemic lupus erythematosus, hypoparathyroidism, Hallervorden Spatz disease and progressive myoclonic epilepsy were excluded due to lack of clinical, laboratory and imaging findings.

Previously reported atypical features of SSPE include isolated psychiatric manifestations, poorly controlled seizures, stroke like onset, hemiparesis, acute encephalopathy, cerebellar ataxia, visual disturbances, symptoms suggestive of intracranial space occupying lesion and parkinsonism like features [3-5]. While this association may be coincidental, but the possibility of tics as a result of insult to the brain due to SSPE should be kept in mind.

*Acknowledgment:* Dr Kaberi Basu, Professor, Department of Pediatrics for helping to diagnose and manage the case.

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