Correspondence

Subacute sclerosing panencephalitis and movement disorders

We read the manuscript entitled 'Subacute sclerosing panencephalitis (SSPE): An update"[1] with great interest. Saurabh *et al.*[1] had reviewed the literature about chronic encephalitis secondary to measles virus infection. They described the Jabbour staging, in which the affected individuals can have a subacute or gradual downhill clinical course. Herein, we would like to discuss the movement disorders encountered in SSPE. The abnormal movements associated with SSPE are in order of frequency, myoclonus, dystonia, parkinsonism, chorea, repetitive behaviours, ballism, ataxia, athetosis and paroxysmal (Table 1). In necropsy studies, it was observed demyelination, extensive perivascular inflammation, glial proliferation and neuronal/glial intranuclear inclusions.[1] In classical SSPE myoclonus, dystonia and parkinsonism, chorea, repetitive behaviours and ballism have been reported.[2] On the other hand, ataxia, athetosis and paroxysmal movements were rarely described. It is noteworthy that athetosis alone was not reported and not all paroxysmal movement disorders were already described in association with SSPE. A study[3] assessed the spectrum of repetitive behaviours in six individuals diagnosed with SSPE. They observed that repetitive motor behaviours more commonly affect upper limbs. Furthermore, the repetitive movements found were clapping, finger-clicking, hand rubbing, flailing and dystonic posturing. Interestingly, vocalisations were observed and included palilalia, whistling, grunting with spitting and pathological crying.[3] The clinical presentation of SSPE may vary and the diagnosis is frequently challenging. In a case report[4] from Turkey of a young adult male, it was reported the spectrum of epileptic phenomena associated with SSPE. In this context, tonic seizures are rare and may be easily misdiagnosed as functional movement disorders in adult individuals due to gait unsteadiness, slurred speech and apathy. High-income countries have seen a significant decline in SSPE cases in the last decades, whereas the incidence is still high in Asia, especially India and the Middle East region. In a study[5] of the clinical spectrum of movement disorders in neurology inpatients in an Indian tertiary care centre, the authors reported that SSPE represents 5.7% of the movement disorders in neurology inpatients. This may suggest that advances in the prevention and management of SSPE are not being sufficiently effective and significant changes should be done in the health system. The case of an 18-year-old female presenting with rapid-onset dystonia and parkinsonism who later developed myoclonus has been reported.[6] this case documented the rare occurrence of rapid-onset dystonia-parkinsonism since the most common causes are drug toxicities, metabolic abnormalities, Wilson's disease and abnormal movements associated with anti-neuronal antibodies.[5] However, this association in all the four stages of SSPE as a combination of myoclonus, parkinsonism and dystonia related or not with behavioural changes and cognitive decline has been reported.[2]

Table 1: Movement disorders associated with subacute sclerosing panencephalitis

Classical
myoclonus
Dystonia
Parkinsonism
Common
chorea
Repetitive behaviours
Ballism
Rare
ataxia
Athetosis
Paroxysmal

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Conflicts of interest

There are no conflicts of interest.

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