A rare syndromic presentation of HIV infection

Sir,

We report a case of a 38-year-old female who presented with weakness of the left hand for a year, soon followed by weakness of the right hand. Over the next 2 months, weakness in bilateral hands worsened to an extent that she had to be fed by attendants. She developed weakness in bilateral lower limbs, left followed by right, over the next 2 months. She noticed thinning of all four limbs with involuntary twitching of skin surface over the bilateral arms, forearms, and thighs. There was no history of any chronic comorbidity in the past. On physical examination, her higher mental functions and cranial nerves were normal. She had generalized wasting, with diffuse widespread fasciculations. Spasticity was present in all four limbs. Her handgrip was weak, with mild motor weakness (Medical Research Council [MRC] Scale Grade 4/5) at shoulder joints. She had MRC Grade 4 power at bilateral hip joints, whereas grade 3 power at bilateral ankle joints. Deep tendon reflexes were generalized brisk. Plantar response was extensor bilaterally. Sensory and cerebellar examination was normal. Routine blood investigations including complete blood count, erythrocyte sedimentation rate, and liver, renal, and thyroid function tests were normal. Serum B12 was 658 pg/mL. HIV-1 was reactive in enzyme-linked immunosorbent assay. CD4 count was 167 cells/mm^3. Chest radiograph was normal. Cerebrospinal fluid (CSF) examination showed total cell count of 2–3/mm^3, sugar of 66 mg/dL, and protein of 48 mg/dL. CSF Gram stain, Ziehl–Neelsen stain, and India ink showed no organisms. Magnetic resonance imaging of the cervical spine was normal. Nerve conduction studies were normal. Electromyographic studies done per motor neuron disease (MND) protocol showed the presence of diffuse spontaneous activity in the form of fibrillations and fasciculations with large amplitude polyphasic motor unit action potential and decreased recruitment pattern. Thoracic paraspinal muscles showed fibrillation potentials. The patient was started on antiretroviral therapy (ART) and is being followed up in the neurology outpatient department.

MND-like presentation of HIV is a rare occurrence. HIV-associated amyotrophic lateral sclerosis (ALS) has a younger age of onset compared to classical ALS.[1] The pathogenesis of ALS-like syndrome in HIV is not clear. Various mechanisms have been proposed such as neuronal excitation and free radical generation.[2] HIV-associated ALS differs clinically from classical ALS. The difference lies

in a younger age of presentation and rapid progression as compared to classical ALS. Furthermore, the prognosis is much better in HIV-associated ALS. It may improve after institution of ART. In a retrospective review of 1700 cases of HIV-infected patients, it was shown that six cases presented as ALS-like syndrome. MacGowan *et al.* reported HIV infection and ALS-like syndrome in a 32-year-old woman who demonstrated recovery of motor deficit following ART.[3] Our patient is still being followed up in OPD without any objective improvement in motor strength after having taken ART for 4 months. Despite sufficient evidence to implicate HIV in this case, the co-occurrence of sporadic ALS cannot be ruled out.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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