SCIENTIFIC LETTER

Acute Motor Axonal Neuropathy in HIV Infection

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To the Editor: Acute motor axonal neuropathy (AMAN)—a variant of Guillian Barre Syndrome (GBS) without sensory involvement has been rarely reported in HIV-infected adults and perhaps never in HIV-infected children.

An 11-y-old girl presented with sudden weakness of lower limbs that gradually progressed over three days to involve upper limbs. She had dysentery 20 d back. One year back, she had an attack of Herpes Zoster and was diagnosed to have HIV1 and HIV2 co-infection on ELISA with CD4 count of 853 cells/mm³. Both parents had asymptomatic HIV infection.

Child was undernourished, weighing 25 kg *i.e.*, < 3rd centile. She had symmetric flaccid quadriparesis with truncal weakness and depressed tendon reflexes. Higher functions and sensory examination were normal. Weakness worsened over next week with complete loss of power in lower limbs but no respiratory or bulbar involvement.

CSF and spinal MRI was normal. Stool was negative for poliovirus. Diagnostic tests for *C. jejuni* were not available. CD4 count was 542 cells/mm³. Nerve conduction velocity revealed pure motor axonal neuropathy without demyelination.

Patient was treated with intravenous immunoglobulin, following which disease progression stopped but no improvement was noted in muscle power till discharge after one month.

Peripheral neuropathies are not uncommon in HIV-infected population, caused by direct viral invasion, immunological dysregulation or antiretroviral drugs, though clinico-pathological spectrum may vary with severity of immunosuppression [1, 2]. Inflammatory demyelinating neuropathies are usually seen during acute seroconversion, while distal sensory neuropathies are common with progressive

immunosuppression [3]. Neurological complications are suggested to be more common in HIV2 than HIV1 infection, perhaps due to longer survival or higher neurotropism [4]. Present case had combined infection.

AMAN is more common in young adults, often following *C. jejuni* infection. Present case had history of dysentery but confirmation of *C. jejuni* infection was not possible. Clinical presentation of AMAN in HIV-infected population is same as in others, except longer and severe course or higher recurrence [5]. Diagnosis is supported by nerve conduction studies.

Treatment is similar to that in HIV sero- negative patients with intravenous immunoglobulins and plasmapheresis being equally effective in hastening recovery, if initiated early.

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