Letter

HTLV-1 Associated myelopathy/tropical spastic paraparesis in Egypt

Human T-cell lymphotropic virus type 1 (HTLV-1) causes adult T-cell leukemia/lymphoma (ATL) and has been recently associated with myelopathy (HAM)/Tropical spastic paraparesis (TSP) (Gessain et al., 1985). The global distribution, epidemiological and clinical pattern of this newly emerging diagnostic entity are unfolding (Montgomery, 1993).

We report the findings of an ongoing study to assess the occurrence of (HTLV-1) and its contribution to the causation of (TSP) in Egyptian patients. Patients presenting to the Neurology departments of university hospitals were diagnosed as TSP if they had paraparesis due to myelopathy with predominant bilateral pyramidal tract manifestations (with or without involvement of the sensory system or sphincters), and had a gradual onset with chronic and slowly progressive course (Gessain et al., 1985). Exclusion criteria were history of spontaneous remissions and exacerbations, abnormal findings on myelography or CT denoting medullary compression or the presence of clinical evidence of systemic disease explaining the condition (e.g. subacute combined degeneration, pellagra, Sjogren’s disease).

Both serum and CSF samples were screened for HTLV-1 antibodies using a microtiter Particle Agglutination (PA) test (Serodia-ATLA test, Fujirebio Inc. Tokyo, Japan), (Ikeda et al., 1984). Positive samples were confirmed by the indirect Immunofluorescence (IF) test, using HTLV-1 transformed MT-2 cells (Miyoshi et al., 1982), mixed with the HTLV-1 negative MOLT-4 cells (Minowada et al., 1972); and the Western Blotting (WB) assay using strips containing the HTLV-1 antigen, obtained from the MT-2 cells lysate.

Two (14.3%) of fourteen patients fulfilling the diagnostic criteria for (TSP) presenting to the Neurology Department of Cairo University, were confirmed to be associated with (HTLV-1). The sera of both cases screened positive by PA, and were confirmed by IF and WB. One of these patients also had HTLV-1 antibodies in the cerebrospinal fluid.

Both patients were males (24 and 26 years old), had no family history of neurological disease nor past history of blood transfusion. Neurologically they would have been otherwise diagnosed as progressive spastic paraplegia of unidentified etiology. In both patients blood picture showed relative lymphocytosis and the cerebrospinal fluid was within normal microscopically and chemically.

HTLV-1 associated myelopathy (HAM/TSP) is occurring in Egypt, and could explain a proportion of spastic paraparesis previously categorized as being of unidentified etiology. The study is continuing, to clarify the extent, epidemiological and clinical patterns of HAM/TSP in Egypt.

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References


