



MEETING ABSTRACT

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Immunohistochemical and virological features of HTLV-1-associated myosites: a study of 13 patients from West Indies and Africa

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Background

HTLV-1 is associated with the onset of various inflammatory diseases such as HTLV-1 Associated Myelopathy / Tropical Spastic Paraparesis, uveitis, infective dermatitis or inflammatory myopathies. Here, we aimed to get new insights into the pathogenesis of HTLV-1 associated inflammatory myopathies (HAIM) by studying muscle biopsy specimens and blood samples from 13 HAIM patients.

Results

Mean age of patients was 52.2 years. 7 patients suffered from polymyositis (PM), and 6, from inclusion body myositis (IBM). Histopathological changes were mild to moderate in most patients. Tumor necrosis factor (TNF)-alpha and myeloid dendritic cells were detected in several patients' biopsies, and Human Leukocyte Antigen (HLA)-ABC, HLA-DR, and matrix metalloproteinase (MMP-2, -9), in most of them. Perforin was frequently detected but there were no apoptotic myonuclei. By means of in situ hybridization, we detected rare HTLV-1 infected infiltrating cells in the muscle tissue of 4 patients. The virus belonged to the cosmopolitan A subtype, transcontinental subgroup. Plasma anti-HTLV-1 antibodies titers were high, but the proviral load was not elevated when compared to asymptomatic HTLV-1

carriers. Myositis-associated autoantibodies were found in patients with HAIM as well as in HTLV-1 infected controls without HAIM, whereas IFN-gamma plasma levels were elevated in HAIM patients.

Conclusions

We describe 13 cases of HTLV-1 associated myositis, which show the classical anatomopathologic features of idiopathic myositis, with moderate muscle inflammation and atrophy. Proviral load was not elevated, but anti-HTLV-1 antibodies titer and IFN-gamma plasma levels were raised.

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