CLINICAL INTERVENTIONS FOR HTLV-1 ASSOCIATED DISEASES

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The most prevalent HTLV-1-associated disease is usually HTLV-1-associated myelopathy (HAM) which eventually affects ~3% of carriers. Whilst there is a paucity of randomised controlled studies a review of the literature reveals three key observations: therapies which target HTLV-1 life cycle have had no impact on proviral load or clinical features; therapies which target inflammation are associated with varying degrees of improvement but need to be prolonged and the earlier the treatment is initiated the greater the restoration of function. Intermittent low dose infusions of the anti-CCR4 monoclonal antibody mogamulizumab which selectively depletes HTLV-1 infected cells has clinical efficacy too. Of the other inflammatory manifestations polymyositis is managed with azathioprine or other immunosuppressive therapy, whilst uveitis responds to topical steroids.
First line treatment of choice for leukaemic presentations of Adult T- cell Leukaemia/Lymphoma (ATL), include acute leukaemia, is uniquely high dose zidovudine plus interferon-alpha. Lymphomatous presentations are treated with standard chemotherapy but allografting (not autografting) is the treatment with curative potential. Anti-CCR4 monoclonal therapy may replace zidovudine/interferon especially for chronic ATL. Correct diagnosis of ATL from other T-cell malignancies is essential to select the appropriate therapies.

HIV-1/HTLV-1 co-infected patients are at higher risk of HAM than monoinfected, possibly due to the persistence of high levels of T-cell activation despite suppressive HIV-1 therapies. Immunosuppressive therapy is used for HAM, as with HTLV-1 monoinfection. ATL also occurs in co-infected patients.

In the UK all HTLV-1 carriers from prevalent areas are screened for latent *Strongyloides stercoralis* infection and treated with Ivermectin prophylactically.

Disclosure of Interest Statement

Imperial College London is the recipient of funding for HTLV-related research from The Wellcome Trust, The Medical Research Council, the National Institute of Health Research and Bloodwise. Imperial College Healthcare NHS Trust has received HTLV clinical trial funding from Kyowa Hakko Kirin.