In vitro stimulation of peripheral blood mononuclear cells (PBMC) from HIV- and HIV+ chancroid patients by Haemophilus ducreyi antigens

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Abstract:

The cellular immune responses to fractionated Haemophilus ducreyi antigens, coated on latex beads, were assessed in patients with chancroid and in controls, using an in vitro lymphocyte proliferation assay. Several fractions of H. ducreyi antigen revealed stimulating activity. However, only the molecular size ranges 91-78 kD, 59-29 kD, and 25-21 kD induced proliferation that may be specifically related to H. ducreyi infection. Lymphocytes from four HIV- patients, successfully treated for chancroid, were not stimulated by H. ducreyi antigen. In general, lymphocytes from HIV+ chancroid patients were less responsive to H. ducreyi antigen compared with those from HIV- chancroid patients. However, two HIV-infected patients showed exceptionally strong responses to high molecular weight fractions. To our knowledge this is the first report demonstrating that H. ducreyi contains specific T cell-stimulating antigens. Based on this work, further identification and purification of the T cell antigens is feasible.