

## Abstract

Immunological and clinical profiles were evaluated in 2 groups: human immunodeficiency virus (HIV)-uninfected and HIV-infected patients, with newly diagnosed pulmonary tuberculosis (TB), and tuberculin-skin-test-reactive healthy control subjects. HIV-uninfected patients with TB were also followed up longitudinally during and after chemotherapy. At the time of diagnosis, purified protein derivative (PPD)-stimulated production of interferon (IFN)-gamma by peripheral blood mononuclear cells from TB patients was depressed, compared with that of healthy control subjects, whereas levels of transforming growth factor (TGF)-beta and interleukin (IL)-10 were increased. In longitudinal studies, PPD stimulated production of IL-10 and TGF-beta returned to baseline by 3 months, whereas IFN-gamma production remained depressed for at least 12 months. These data indicate that the immunosuppression of TB is not only immediate and apparently dependent (at least in part) on immunosuppressive cytokines early during the course of Mycobacterium TB infection but is also long lasting, presumably relating to a primary abnormality in T-cell function.