

INTERFERON GAMMA PRODUCTION IN THE COURSE OF *MYCOBACTERIUM TUBERCULOSIS* INFECTION

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It is unclear why some individuals with unknown predisposition develop tuberculosis, while others remain healthy in spite of heavy exposure. Interferon gamma is considered to be a key cytokine responsible for resistance to *M. tuberculosis* infection, as confirmed by increased susceptibility to mycobacterial infections in rare inherited defects in IL-12-IFN gamma axis. The aim of this study was to assess the IFN gamma production by peripheral blood lymphocytes from immunocompetent TB (tuberculosis) patients. The study group included 51 TB patients. In all cases TB was confirmed by culture. Twenty healthy TB contacts were considered as control group. Commercially available ELISA - based assays were used to measure IFN gamma in the supernatant of whole blood cell cultures after stimulation with PWM (*Phytolacca Americana*), PHA (phytohemagglutinin) and PPD (Purified protein derivative). No difference in IFN gamma secretion between patients and control group was found when blood cells were stimulated by PWM or PHA. PPD induced IFN gamma production was higher in tuberculous patients than in controls. The secretion of IFN gamma after non-specific stimulation varied in different clinical and radiological presentations of tuberculosis and it was lower in most advanced and extensive forms of the disease. It is not clear whether the difference in production and release of IFN gamma is primary or secondary phenomenon in the course of the disease.