INTRODUCTION

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Proinflammatory cytokine tumor necrosis factor-α is released within the cerebrospinal fluid (C.S.F.) compartment of patients with bacterial meningitis upon recognition of bacterial products.

The production of proinflammatory cytokines and the extent of the inflammatory response are partially controlled by antiinflammatory compounds such as interleukin 10 (IL-10). IL-10 is produced by monocyte/macrophages, the Th2 subset of T-helper lymphocytes and B lymphocytes and suppresses the synthesis of proinflammatory cytokines by T cells (Vieira et al., 1991), polymorphonuclear leukocytes (Cassatella et al., 1993) and monocytes/macrophages (de Waal Malefyt et al., 1991).

IL-10 protects against TNF-mediated lethality in murine models of endotoxaemia (Gerard et al., 1993).

C.S.F. level of IL-10 is significantly increased in patients with bacterial meningitis suggesting a role for IL-10 in the control of the inflammatory response in the C.S.F. compartment (Lehmann et al., 1995).

It was reported that IL-10 in C.S.F. will decrease the inflammatory reaction associated with meningitis and will result in the development of fewer sequelae because of its inhibitory effect on the production of TNFα (Van Furth et al., 1995).