

Abstract

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Stress Hormones, Th1/Th2 patterns, Pro/Anti-inflammatory Cytokines and Susceptibility to Disease.

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BACKGROUND: In general, stress has been regarded as immunosuppressive. Recent evidence, however, indicates that acute, subacute or chronic stress might suppress cellular immunity but boost humoral immunity. This is mediated by a differential effect of stress hormones, the glucocorticoids and catecholamines, on T helper 1 (Th1)/Th2 cells and type 1/type 2 cytokine production. Furthermore, acute stress might induce pro-inflammatory activities in certain tissues through neural activation of the peripheral corticotropin-releasing hormone-mast cell-histamine axis.

CONCLUSIONS: Through the above mechanisms, stress might influence the onset and/or course of infectious, autoimmune/inflammatory, allergic and neoplastic diseases.

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