乾癬のT細胞におけるケモカイン受容体発現およびサイトカイン産生の病因的役割

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Involvement of chemokine receptor expression and cytokine production by T lymphocytes in the pathogenesis of psoriasis.

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Allocation Type

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Section

一般

Research Field

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Research Institution

Kanazawa university

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Research Abstract

Studies have suggested that psoriasis vulgaris is mediated by type 1 T cells. In this study, we examined both chemokine receptor expression and intracellular cytokine production by circulating T cells to check the type 1 / type 2 balance in psoriasis. CCR4^+ and CXCR3^+ T cells predominantly produced interleukin-4 and interferon-γ, respectively. The frequency of interferon-γ-producing cells and that of CXCR3^+ cells in circulating CD4^+ T cells were similar for psoriatic patients and healthy control subjects. By contrast, the frequency of CCR4^+ CD8^+ T cells and CCR4/CXCR3 ratio in circulating CD8^+ T cells were significantly higher in psoriatic patients than in healthy control subjects. Analysis of intracellular cytokine production also indicated relative increase of type 2 CD8^+ T (Tc2) cells in peripheral blood from psoriatic patients. The frequency of circulating Tc2 cells directly correlated with Psoriasis Area and Severity Index. Immunohistochemical analysis showed that not only CXCR3^+ CD8^+ T cells, but also a similar number of CCR4^+ CD8^+ T cells infiltrated the psoriatic epidermis and dermis. Our findings suggest an increase in Tc2 cell number in blood from psoriatic patients, and the association of Tc2 cells with inflammation in psoriasis.

Research Products (2 results)

All | Other

All | Publications (2 results)

[Publications] M.Inaoki, S.Sato, F.Shirasaki, N.Mukaida, K.Takehara: "The frequency of type 2 CD8+ T cells is increased in peripheral blood from patients with psoriasis vulgaris"Journal of Clinical Immunology. (in press). (2003)

[Publications] M. Inaoki, S. Sato, F. Shirasaki, N. Mukaida, K. Takehara: "The frequency of type 2 CD8^+ T cells is increased in peripheral blood from patients with psoriasis vulgaris"J. Clin. Immunol.. (in press). (2003)

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