

Immunological Restoration and Anti-tumor Effect by Japanese Herbal Medicine (TJ-48) in Mice

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Introduction

Juzen-Taiho-To (TJ-48), one of the Kampo, Japanese herbal medicine was first described in China and introduced into Japan eight hundred years ago and since then has been administrated mainly to patients weakened by long illness. Currently it has been also used for cancer patients and showed its anti-tumor effects. These effects were reported as its phagocytosis enhancement, cytokine induction, antibody production and so on. In this study, we examined the effect of oral administration of TJ-48 in mice on the immunological restoration of liver and anti-tumor effects.

Methods

Grouped mice have been oral administrated with or without TJ-48 for one, three, and seven days long.

After sacrificed, the liver tissue was fixed, embedded and stained with H-E and anti IL-12 antibody by common staining methods and observed.

Results

Although the mice received herbal medicine had same appearance compared with non-received mice, these liver were infiltrated massive mononuclear cells. some of which were aggregated to clusters. Immuno-histochemical staining revealed that there was

Abundant cytokine expression of IL-12 on the liver of TJ-48 received mice.

Discussion

Oral administration of TJ-48 may introduce the expression of IL-12 and following immunological restoration as NKT induction.