Analysis of the immunological role of spleen in gastric cancer patients: from the viewpoint of cytokine producing ability of splenocytes

1999 Fiscal Year Final Research Report Summary

Analysis of the immunological role of spleen in gastric cancer patients - from the viewpoint of cytokine producing ability of splenocytes -

Research Project

Project/Area Number

10671167

Research Category

Grant-in-Aid for Scientific Research (C)

Allocation Type

Single-year Grants

Section

一般

Research Field

Digestive surgery

Research Institution

Kanazawa University

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Project Period (FY)

1998 – 1999

Keywords

gastric carcinoma / splenocyte / Th1 / Th2 / IL-12 / IFN-γ / OK-432 / tumor bearing state / cytokine

Research Abstract

Cytokine production from splenocytes of healthy mouse induced with OK-432 differs depending their genetic background. In C57BL/6 mice with B16 melanoma, splenocytes derived from the middle stage of tumor bearing produced IL-2, IL-6, IL-10 and IFN-γ. There was little spontaneous IL-12 production from tumor bearing mice splenocytes. All cytokine production were reduced in their later stage of tumor bearing. Splenocytes derived from the middle stage of tumor bearing mice could produce IL-12 when activated with OK-432 in vitro. Furthermore, in vivo treatment with OK-432 tend to inhibit tumor growth of B16 melanoma, which was accompanied by IL-12 and IFN-γ production of splenocytes. Regarding the splenocytes of gastric cancer patients, production of IL-4, IL-6 and IFN-γ was observed but we need further

investigation because there exist individual differences between the patients.
In the ascitic mouse model, OK-432 could induce Th1 cytokine production such as IL-12 and IFN-γ in the ascites. In human treatment of gastric cancer, we have tried to administer MMC and OK-432 to control peritoneal carcinomatosis, and there were responder cases with increasing I L-2, IL-12, ILl5 and IFN-γ in their cancerous ascites. There was a correlation between their favorable prognosis and their Th1 cytokine production after the OK-432 treatment.

Research Products (10 results)

All | Other

All | Publications

[Publications] 藤本敏博、他: "癌性胸腹膜炎に対するOK-432局所投与の抗腫瘍効果と作用機序について"Biotherapy. 12巻11号. 1479-1485 (1998)

[Publications] 藤本敏博、他: "Th1 inducerとしてのOK-432の役割"Therapeutic Rssearch. 19巻7号. 113-119 (1998)

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