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Immunological Mechanisms of Antitumor Activity of Some Kinds of Chinese Herbs: Meth A-Induced Delayed Type Hypersensitivity.

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The effects of 4 kinds of Chinese herbs, *A. capillaris*, *S. doederleinii*, *A. macrocephala* and *S. subprostrata*, on delayed type hypersensitivity (DTH) response caused by Meth A tumor (Meth A-DTH) were examined in primary tumor bearing mice. These herbs augmented the Meth A-DTH, although they did not affect the DTH response caused by picryl chloride. These results and previous observations suggest that *A. capillaris* shows antitumor activity mainly through a direct cytotoxicity, and that the others display the activity through the enhancement of T cell-mediated tumor immunity.

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Comparative Study of 1.5-Hour and 48-Hour Homologous Passive Cutaneous Anaphylaxis in the Mouse Ear.

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To characterize passive cutaneous anaphylaxis (PCA) in the mouse ear, reactions caused by non-heated and heated antiserum were compared to those caused by monoclonal IgE antibody (mc-IgE) and monoclonal IgG1 antibody (mc-IgG1). mc-IgE was heat-labile and caused a long lasting sensitization for PCA. mc-IgG1 was a heat-stable and short-sensitizing antibody. The ability for long-lasting sensitization of non-heated antiserum was abolished by heat treatment. The sensitization by heated antiserum was disappeared rapidly but slightly longer than that by mc-IgG1. Although dye leakage processes in PCA by non-heated antiserum and mc-IgE were identical, dye leakage was significantly delayed in mc-IgG1-mediated PCA in comparison with that in heated antiserum-mediated PCA.

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Immunopharmacological Studies of Unsei-In (Wen-Qing-Yin), a Chinese Blended Medicine. Examination of Most Effective One of Chinese Herbs Composed of Unsei-In on Type IV Hypersensitivity Reaction.

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The effects of Chinese herbs composed of Unsei-in on type IV hypersensitivity reaction were investigated. Unsei-in is composed of Simotsu-tō and Oren-gedoku-tō, and the latter was found to markedly inhibit the primary and secondary immune responses. Furthermore, it also inhibited the GvH-R. In 4 kinds of Chinese herbs composed of Oren-gedoku-tō, *Phellodendri C.* was found to exhibit the most potent inhibitory activity on the primary and secondary immune responses in picryl chloride-induced contact dermatitis. It also inhibited the GvH-R.