[*Pharmacology*, **60**, 97-104 (2000)] [Lab. of Pharmacology]

Different Effect of Antiallergic Drugs on IgE-mediated Cutaneous Reaction in Passively Sensitized Mice.

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We investigated the effects of several antiallergic on IgE-mediated triphasic cutaneous reaction in mice. Prednisolone, a PAF receptor antagonist Y-24180, cyclosporin A and FK-506 inhibited all three phases of the reaction. Although diphenhydromine inhibited only the first phase, azelastine and an LT receptor antagonist ONO-1078 inhibited the first and the second phases. An LTB4 receptor antagonist ONO-4057 inhibited the second and the third phases, but failed to inhibit the first phase reaction.

[*Allergol. Int.*, **49**, 75-81 (2000)] [Lab. of Pharmacology]

Effect of Am-80, a Novel Retinoid Derivative, on Contact Hypersensitivity Caused by Repeated Applications of Hapten in Mice.

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The inhibitory effect of 4-((5,6,7,8-tetrahydro-5,5,8,8-tetramethyl-2-naphthyl) carbamol) benzoic acid (Am-80), a synthetic retinoid, on mouse contact hypersensitivity was investigated. Am-80 significantly inhibited the contact dermatitis in a dose-dependent manner. Infiltration of inflammatory cells was clearly decreased by Am-80. Am-80 potently inhibited the expression of IFN-γ mRNA, but not IL-1 and IL-4 mRNA. These findings indicated that Am-80 may inhibit the contact dermatitis at the post-sensitization phase by inhibiting IFN-γ production at the transcriptional level in mice.

[*Bioorg. Med. Chem.*, **8**, 373-380 (2000)] [Lab. of Pharmacology]

Synthesis and Biological Activities of Novel Antiallergic Agents with 5-Lipoxygenase Inhibiting Action.

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Novel benzimidazole derivatives were synthesized and their pharmacological activities were examined. These compounds exhibited a suppressive effect on allergic histamine release from rat peritoneal mast cells, an autoganistic action on histamine-induced contraction of guineapig ileum, and an inhibitory action on 5-lipoxygenase in RBL-1 cells. A compound BOM1006 exhibited a dose-dependent suppression of rat homologow PCA by oral administration.

[*J. Trad. Med.*, **17**, 17-25 (2000)] [Lab. of Pharmacology]

Effect of Some Kampo Medicines, Including Tokaku-joki-to (Tao-He-Cheng-Qi-Tang), on IgE-mediated Triphasic Skin Reaction in Passively Sensitized Mice.

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The inhibitory effects of Kampo medicines on IgE-dependent triphasic cutaneous reaction in mice were investigated. Among the formulations examined, Tokaku-joki-to was effective at inhibiting the three phases of the reaction and scratching behavior associated with the first phase. The inhibition primarily depended on its composed drugs, Glycyrrhizae Radix and Cinnamomi Cortex. Tokaku-joki-to may be usefull for the treatment of cutaneous inflammatory diseases.