〔Folia pharmacol. japon., 85, 7 (1985)〕

Effect of Saiboku-tō, a blended Chinese traditional medicine, on Type I hypersensitivity reactions, particularly on experimentally-caused asthma.

TAKESHI NISHIYORI, HIROSHI TSUCHIYA, NAOKI INAGAKI, HIROICHI NAGAI, AKIHIDE KODA*

Effect of Saiboku-tō on Type I hypersensitivity reactions was investigated. Homologous PCA in guinea pigs was inhibited significantly. In experimentally-caused asthma in guinea pigs, Saiboku-tō dramatically inhibited decreases in the rate and volume of respiration and an increase in the ratio of expiration time to inspiration time. Schultz-Dale reaction in guinea pig tracheal muscle was also inhibited significantly. Histamine release from sensitized guinea pig lung tissue was inhibited though the release of SRS-A was not affected. Saiboku-tō did not show an antagonistic effect to allergic mediators.

〔Int. J. Immunopharmac., 7, 41 (1985)〕

Inhibition of delayed hypersensitivity reactions by a new agent, cis-1-methyl-4-isohexylcyclohexane carboxylic acid (IG-10).

AKIHIDE KODA*, ICHIRO NAKATOMI, KUNIHIRO NAKAMURA, HIDEAKI INOUE, TOMOKO KAMIMURA

The mechanisms regarding the inhibitory action of a newly synthesized compound, IG-10, was investigated on delayed hypersensitivity reactions, p-Phenylenediamine-induced contact dermatitis in guinea pigs was significantly inhibited when the drug was given p.o. at various times after challenge with the antigen. IG-10 inhibited both contact dermatitis and monocytes or neutrophils infiltrations induced by picryl chloride in mice. IG-10 inhibited the release of SRF as well as the release of MIF from guinea pig lymphocytes stimulated by PHA-P. The reduction of Δ^4-3-ketone of aldosterone and/or hydrocortisone by rat liver homogenates was not affected with IG-10. These results suggest that the inhibitory action is due to the inhibition of release of lymphokines.

〔Jpn. J. Allergol., 34, 962 (1985)〕

The effect of 6-amidino-2-naphthyl-4-guanidinobenzoate (FUT-175) on IgE antibody mediated allergic reactions in experimental animals.

HIROICHI NAGAI, HIROAKI YAMADA, TAMOTSU TAKIZAWA, TEIJI IWAMOTO, NAOKI INAGAKI, AKIHIDE KODA*

The effect of FUT-175 on IgE antibody mediated experimental allergic reactions was studied. IgE antibody mediated reactions including rat homologous PCA, degranulation of rat mesenterium mast cells and the release of histamine from sensitized rat peritoneal mast cells and guinea pig lung tissues were inhibited by FUT-175. The complement dependent reaction, Forssman systemic shock in guinea pigs, was clearly inhibited by both FUT-175 and hydrocortison acetate. These results indicate that FUT-175 is effective not only on complement dependent but also on IgE antibody mediated, complement independent allergic reaction.