

P26 INFLUENCE OF TOTAL GINSENG SAPONIN ON VASOCONSTRICTORS

-INDUCED CONTRACTILE RESPONSES IN THE RAT AORTA

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The present study was designed to examine the effect of total ginseng saponin on contractile responses of vasoconstrictors in the rat aorta.

Phenylephrine (an adrenergic α_1 -receptor agonist) and high potassium (a membrane depolarizing agent) caused greatly contractile responses in the rat aorta, respectively. However, in the presence of total ginseng saponin (600 ug/ml), the contractile responses of phenylephrine (10^{-5} and 10^{-7} M) and high potassium (3.5×10^{-2} and 5.6×10^{-2} M) were markedly potentiated whereas prostaglandin $F_{2\alpha}$ (5×10^{-6} M)-induced contractile response was not affected. The contractile responses induced by phenylephrine (10^{-5} M) and high potassium (3.5×10^{-2} M) even in the presence of total ginseng saponin (600 ug/ml) were greatly inhibited by the pretreatment of nicardipine (10^{-6} M), a calcium channel blocker.

Taken together, these experimental results suggest that total ginseng saponin can enhance the contractile responses evoked by stimulation of adrenergic α_1 -receptor and the membrane depolarization in the rat aorta, which seems to be associated to calcium influx.