AORTA RESPONSE TO SECRETIN IN INTACT AND DIABETIC RATS

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The influence of secretin (10^{-10} – 10^{-8} M), a gastrointestinal hormone, on the relaxing response of rat thoracic aorta rings preconstricted by 40 mM KCl was studied by measuring changes in isometric tension in intact and diabetic animals. Initial contraction of aorta rings was markedly decreased in diabetic state. Secretin administered at two higher doses (10^{-9}, 10^{-8} M) caused significant relaxation. In diabetes, relaxing effect was observed at all three doses of the peptide. These data indicate that secretin relaxes thoracic aorta rings and state of diabetes markedly amplifies the relaxant response to this peptide.

Key words: secretin, isolated aorta, rats, diabetes