Beneficial effect of aqueous garlic extract on the vascular reactivity of streptozotocin-diabetic rats.

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Source

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Abstract

The present study evaluated the beneficial effect of aqueous extract of garlic (Allium sativum L.; 100mg/kg/day) on the alterations in vascular reactivity of streptozotocin-diabetic rats. After 8 weeks of treatment, thoracic aortic rings of rats were mounted in organ baths and contractile responses to phenylephrine and relaxant responses to acetylcholine and isosorbide dinitrate were assessed. Induction of diabetes significantly increased contractile responses to phenylephrine and impaired endothelium-dependent relaxations to acetylcholine in aortic rings, but did not change endothelium-independent relaxation to isosorbide dinitrate. Garlic administration significantly improved the impaired endothelium-dependent relaxations and decreased the enhanced contractile response to phenylephrine in diabetic rats. It is concluded that intraperitoneal administration of aqueous garlic extract can improve endothelial dysfunction in insulin-dependent model of uncontrolled diabetes.

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