The selective antianginal effect without changing blood pressure of butylidenephthalide in conscious rats.

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Abstract

Synthetic butylidenephthalide (Bdph), 60 mg/kg per os (p.o.) given 3 h prior to injection of pituitrin (4 U/kg, i.v.), significantly prevented T-wave lowering on lead II electrocardiograph in unanesthetized rats. The effective dose, 60 mg/kg, was about 1/56th of the median lethal dose (LD50, p.o.) in rats. However, Bdph (60 mg/kg, p.o.) did not affect systolic pressure and heart rate in unanesthetized rats. Therefore, Bdph, found in the rhizome of Ligusticum chuaxiong Hort. (L. wallichii Franch., Umbelliferae), appears to have selective antianginal effect without changing blood pressure and heart rate..