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Selective blockade of α2-adrenoceptor subtypes modulates contractility of rat myocardium

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Abstract

© 2016 Springer Science+Business Media New York.The study examined the dose-dependent effects of selective antagonists of α2A/D-, α2B-, and α2C-adrenoceptors applied in concentrations of 10-9-10-5 M on atrial and ventricular contractility of rat myocardium in vitro. Selective blockade of each α2-adrenoceptor subtype affected the contractile force of the atrial and ventricular strips. Various concentrations of α2A/D-and α2C-adrenoceptor antagonists produced positive inotropic effect on ventricular strips and negative effect on atrial strips. α2B-Adrenoceptor blocker in the majority of the tested concentrations produced a positive inotropic effect in both atria and ventricles.

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Keywords

Chronotropy, Heart, Rat, α -adrenoceptor 2