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Effect of α_2 -adrenoceptor stimulation on cardiac activity in rats

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Abstract

We studied the effect of α_2 -adrenoceptor stimulation with clonidine on BP and cardiac activity in rats. Variations in BP and chronotropism of the heart were studied in vivo after bolus injection of clonidine. In vitro experiments were performed to evaluate a dose-dependent change in myocardial contractility of the atria and ventricles after treatment with clonidine in concentrations of 10^{-9} - 10^{-5} M. α_2 - Adrenoceptor stimulation with clonidine had a negative chronotropic and inotropic effect and induced the decrease in systolic BP of rats. © 2014 Springer Science+Business Media.

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Keywords

Blood pressure, Chronotropism, Heart, Inotropy, Rat