

Observation Study of Antiarrhythmic Effect of “Fuyun”, a Multiherb Prescription for Ventricular Arrhythmias, in Isolated Rat Hearts

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Abstract

Background: Premature ventricular contractions (PVCs) are common in both patients with known heart diseases and healthy populations, and PVCs may decrease the quality of life and even lead to heart failure. “FuYun” is a multiherb prescription for arrhythmia. The present study was designed to observe its effects on ouabain-induced ventricular arrhythmia in isolated rat hearts.

Method: Thirty-two SD rats (male, 250 to 350 g) were divided into 4 groups randomly. The hearts, after isolated briefly, were excised

and perfused retrogradely in Langendorff equipment at 37°C with Krebs solution containing ouabain and “FuYun” extract. The electrocardiogram and the left ventricular tension were recorded isometrically with transducers on a Biopac recorder.

Results: With pre-administration of the isolated hearts, “FuYun” increased the time required to produce ventricular arrhythmias by ouabain, and decreased the quantity of arrhythmic beating in a concentration-dependent manner. Conclusion: The present work has demonstrated that “FuYun” exhibited potential antiarrhythmic effects in isolated rat hearts.

Keywords: FuYun; Ouabain; Arrhythmia; Isolated rat hearts