

A heart-rate-reducing medication reduces the risk of heart failure and cardiac fibrosis

July 28 2011

The findings of a Montreal Heart Institute (MHI) study published in the scientific journal *Cardiology* suggest that ivabradine, a heart rate reduction medication, is also effective in reducing the risk of diastolic heart failure (left ventricular insufficiency) and cardiac fibrosis.

The benefits of slower [heart rate](#) on mortality and morbidity associated with cardiovascular disease no longer need to be demonstrated. In this study, titled "Heart Rate Reduction by Ivabradine Reduces Diastolic Dysfunction and Cardiac [Fibrosis](#)," researchers sought to determine the effectiveness of ivabradine in treating diastolic dysfunction of the [left ventricle](#), a condition affecting 40% of people with heart failure.

The study was conducted on rabbits given a standard diet, a cholesterol-enriched diet or a cholesterol-enriched diet with ivabradine. It revealed that as well as improving the myocardial performance index, ivabradine greatly improved left ventricular diastolic dysfunction in animals receiving a cholesterol-enriched diet. Ivabradine also reduced fibrosis of the heart chambers.

According to Dr. Jean-Claude Tardif, Director of the MHI Research Centre and professor of medicine at the Université de Montréal, the results are both interesting and encouraging. "The effectiveness of ivabradine in treating angina pectoris is now well known. However, few treatments are available to patients with diastolic [heart failure](#). The beneficial effects of ivabradine demonstrated in laboratory suggest that this course of treatment should be further investigated." Clinical studies

with subjects are expected to follow.

Provided by Montreal Heart Institute

Citation: A heart-rate-reducing medication reduces the risk of heart failure and cardiac fibrosis (2011, July 28) retrieved 26 April 2024 from <https://medicalxpress.com/news/2011-07-heart-rate-reducing-medication-heart-failure-cardiac.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.