

Heart rate-lowering drug improves exercise capacity in patients with stable angina

October 30 2008

Results from a late-breaking clinical trial, presented at the 2008 Canadian Cardiology Congress (CCC) in Toronto, show for the first time that combining the pure heart rate reduction medication ivabradine to current treatments of patients with stable angina improves their exercise capacity.

The study involved almost 900 patients from Canada and internationally with documented coronary artery disease and a history of stable angina. The objective was to determine if treatment with ivabradine could improve exercise capacity in these patients beyond what was previously achieved with standard treatments. Patients received either ivabradine 5 mg bid for two months (increased to 7.5 mg bid in 87.5 percent of patients for an additional two months) or placebo for four months in addition to their current beta blocker background therapy (atenolol 50 mg daily).

"Our findings confirm that adding ivabradine over and above the standard of care achieves increases exercise tolerance," said Dr. Jean-Claude Tardif, the study's lead investigator, a professor of medicine at the Université de Montréal and director of the Montreal Heart Institute Research Centre.

"For patients who have stable angina the results are very encouraging, particularly because of tolerability concerns with higher doses of beta blockers. As a result patients are often not achieving optimal heart rate reduction on standard therapy alone," adds Dr. Tardif.



An analysis of the data from treadmill exercise tests shows that patients who were treated with ivabradine in addition to a beta blocker (n=441) demonstrated a threefold improvement in total exercise duration at four months compared to those being treated with standard doses of beta blocker alone.

After four months of treatment, the ivabradine and beta blocker combination was associated with a mean heart rate reduction of nine beats per minute (bpm) compared to one bpm in patients remaining on beta blockers alone. Patients receiving the ivabradine and beta blocker combination also had considerable improvements in symptoms and ischemia as measured by time to limiting angina, time to angina onset, and time to 1-mm ST-segment depression.

Ivabradine is not yet available for clinical use in Canada.

Source: University of Montreal

Citation: Heart rate-lowering drug improves exercise capacity in patients with stable angina (2008, October 30) retrieved 9 April 2024 from https://medicalxpress.com/news/2008-10-heart-rate-lowering-drug-capacity-patients.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.