

# Common antibiotics and blood pressure medication may result in hospitalization

January 17 2011

---

Mixing commonly used antibiotics with common blood pressure medications may cause hypotension (abnormally low blood pressure) and induce shock in older patients, requiring hospitalization, according to a study published in *CMAJ*.

"Macrolide antibiotics (erythromycin, clarithromycin and azithromycin) are among the most widely prescribed antibiotics, with millions of [prescriptions](#) dispensed in Canada each year." writes Dr. David Juurlink, Scientist at the Sunnybrook Research Institute and the Institute for Clinical Evaluative Sciences with coauthors. "The drugs are generally well-tolerated, but they can cause several important drug interactions."

This study was conducted among Ontarians 66 years and older who were treated with a calcium-channel blocker (drugs often used to treat [high blood pressure](#)) between 1994 and 2009. The researchers then identified those who were hospitalized for low blood pressure and, in that group, whether or not a macrolide antibiotic had been prescribed shortly beforehand.

The researchers identified 7100 patients hospitalized for low blood pressure or shock while taking a calcium channel blocker. Treatment with erythromycin was found to increase the risk of [low blood pressure](#) almost 6-fold, while clarithromycin increased the risk almost 4-fold. In contrast, azithromycin did not increase the risk of hypotension.

"In older patients receiving calcium channel blockers, the two macrolide

antibiotics erythromycin and clarithromycin are associated with a major increase in the risk of hospitalization for hypotension," conclude the authors. "However, the related drug [azithromycin](#) appears safe. When clinically appropriate, it should be used preferentially in patients receiving a calcium channel blocker."

Provided by Canadian Medical Association Journal

Citation: Common antibiotics and blood pressure medication may result in hospitalization (2011, January 17) retrieved 26 April 2024 from <https://medicalxpress.com/news/2011-01-common-antibiotics-blood-pressure-medication.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.