

## **Drug interaction causes hypotension**

April 5 2019, by Leigh Macmillan



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The commonly used muscle relaxant tizanidine can lower blood pressure. Tizanidine is metabolized by the enzyme CYP1A2, and concurrent use of tizanidine and a CYP1A2 inhibitor, such as ciprofloxacin, greatly increases tizanidine plasma concentrations. Despite package insert warnings, tizanidine and CYP1A2 inhibitors are commonly co-



## prescribed.

Cecilia Chung, MD, and colleagues used electronic health records to study the risk of hypotension (low blood pressure) in patients taking tizanidine or cyclobenzaprine (another muscle relaxant) concurrently with a strong CYP1A2 inhibitor.

They found that severe hypotension occurred more often in the tizanidine group than the cyclobenzaprine group. The risk of severe hypotension was higher in patients with more comorbidities and those who used three or more antihypertensive drugs.

The findings, reported in the March issue of *Clinical Pharmacology & Therapeutics*, demonstrate an interaction between tizanidine and strong CYP1A2 inhibitors in routine clinical practice. Clinicians should avoid co-prescribing these medications, particularly in patients at higher risk of severe <a href="https://example.com/hypotension">hypotension</a>, the authors conclude.

**More information:** Sandip Chaugai et al. Co-Prescription of Strong CYP1A2 Inhibitors and the Risk of Tizanidine-Associated Hypotension: A Retrospective Cohort Study, *Clinical Pharmacology & Therapeutics* (2018). DOI: 10.1002/cpt.1233

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