

Discontinuation of Vascular Medications Among Patients at Risk for Vascular Disease in the Primary Care Setting

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Funding Source: Ontario Ministry of Health Primary Healthcare Transitions Fund

Abstract

Background

Long-term persistence with vascular medications is necessary for prevention of vascular events, however patients and physicians may prematurely discontinue these important medications. The objective of this study was to provide pharmacosurveillance data on the frequency and reasons for discontinuation of vascular medication among primary care patients with vascular risk, and to determine the effect of a vascular management program on rates of discontinuation.

Methods

Medication information was collected for all patients enrolled in COMPETE III, a large randomized controlled trial of an electronic vascular disease management program on the quality of vascular care. Start and stop dates for each medication and the reason for discontinuation were collected over 12 months by patient telephone interview and a review of electronic medical records in family physicians' offices. Discontinuation rates were calculated as the number of times medications were discontinued over the number of times medications were prescribed during the study.

Results

Of the 15,870 medications prescribed, there were 738 discontinuations among 1104 study patients. The mean (\pm SD) number of medications discontinued was 0.69 (\pm 1.02) with a mean discontinuation rate of 6.9% (\pm 16.9%). No difference was seen in the rate of medication discontinuation between the intervention and control group (6.7% vs. 7.2%, $p = 0.665$). The most common reasons for medication discontinuation were intolerance (26.8%), lack of efficacy (12.3%), and stopped by a physician other than the primary prescriber (12.2%). The drug classes with the highest rate of discontinuations were anticoagulants (18.5%), ACE-inhibitors (18.0%), and statins (15.7%).

Conclusions

Discontinuation of vascular medications is not uncommon, even among patients with high vascular risk. Medications were discontinued for both appropriate and inappropriate reasons. The reasons for discontinuation are helpful in explaining why physicians are not able to always adhere to evidence-based guidelines for prescribing vascular medications.

Keywords: pharmacosurveillance, vascular, medication discontinuation