Clinical study: acute myocardial infarction

Outpatient adherence to beta-blocker therapy after acute myocardial infarction

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Abstract

Objectives

This study was designed to determine adherence to outpatient beta-blocker therapy following acute myocardial infarction (AMI).

Background

The importance of beta-blocker therapy after AMI is widely recognized. Outpatient adherence with this recommendation, however, is not well described.

Methods

Data on 846 patients surviving AMI were studied. Factors associated with filling a beta-blocker prescription within 30 days postdischarge and the proportion of patients who were or were not discharged on beta-blockers who filled prescriptions for them by 30, 180, and 365 days post-AMI discharge were assessed.

Results

Patients with a discharge order for beta-blocker therapy were more likely to fill a prescription in the first 30 days postdischarge (hazard ratio [HR] 15.82, 95% confidence interval [CI], 10.75 to 23.26).
Patients older than age 75 years were less likely than those age <65 years to fill a prescription (HR 0.63, 95% CI 0.42 to 0.93). Gender, race, and being an ideal candidate did not affect beta-blocker use. Among patients who were discharged on beta-blockers, 85% of survivors had filled a prescription by 30 days postdischarge, and 63% and 61% were current users at 180 and 365 days, respectively. In contrast, only 8% of those patients with no discharge order for beta-blockers had filled such a prescription by 30 days, and 13% and 12% of patients were current users at 180 and 365 days, respectively.

**Conclusions**

Patients not discharged on beta-blockers are unlikely to be started on them as outpatients. For patients who are discharged on beta-blockers after AMI, there is a significant decline in use after discharge. Quality improvement efforts need to be focused on improving discharge planning and to continue these efforts after discharge.

**Abbreviations:** ACC; American College of Cardiology; AHA; American Heart Association; AMI; acute myocardial infarction; CI; confidence intervals; HR; hazard ratio; LVEF; left ventricular ejection fraction; RR; relative risk