INTRODUCTION

Myocardial infarction (MI) is an important cause of mortality. Despite optimal acute phase management, secondary prevention remains essential. American and European Societies of cardiology recommend following association for post-myocardial infarction therapy (PMIT):

B: beta-blocker (BB)
A: antiplatelet combination (aspirin + ADP-receptor blocker)
S: HMG-CoA reductase inhibitor (“Statin”)
I: Angiotensin Converting Enzyme (ACE)-inhibitor or Angiotensin Receptor Blocker (ARB).

The aims of the study were to:
1) evaluate the treatment at discharge for patients hospitalized for MI
2) elaborate local post-MI guidelines
3) evaluate the impact of the newly implemented guidelines.

METHOD

Pre-post study, the intervention being the implementation of guidelines in October 2009 (see below) and their reinforcement by clinical pharmacists. Data were collected retrospectively from electronic patient records. The study was approved by the institutional review board. Patients hospitalized for MI on the cardiology or the internal medicine wards of a regional hospital, with a cathlab on site, between October 2007 and September 2008 (pre) and between October 2009 and September 2010 (post) were included.

Outcomes: Proportion of patients prescribed
1) each class of PMIT individually
2) all four classes or part of the PMIT when there was a contraindication to one or more classes.

RESULTS

210 patients were included in the pre study, and 304 in the post study. Age and sex were similar in the 2 groups (mean of 66 years and 72% males).

CONCLUSION

The proportion of patients receiving each class and the combination of all four classes has increased. The lowest prescribed class remains the antiplatelet combination. However, all but one patient received at least either an ADP-receptor blocker or aspirin. Written pocket size guidelines their presentation to internal medicine physicians and reinforcement by clinical pharmacists help to increase the proportion of patients discharged with an optimal post-MI treatment. Efforts have to be made to maintain a high quality of individual therapy (especially combination of antiplatelet drugs), ideally with all four drugs. The guidelines will be updated regularly, according to the rapid changes in Associations’ recommendations.