Role of Beta-Blocker Therapy in the Post-Myocardial Infarction Patient With and Without Left Ventricular Dysfunction

The Post-Myocardial Infarction Guideline Committee

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Patients with acute myocardial infarction are at short- and long-term risk for recurrent infarction, heart failure, arrhythmias, and mortality. Beta-blockers have been demonstrated to reduce morbidity and mortality in the initial hours and days of evolving infarction in the weeks, months, and years after myocardial infarction. Guidelines from the American Heart Association and American College of Cardiology recommend the use of beta-blockers in patients short- and long-term after myocardial infarction in the absence of contraindications.¹²

Despite clinical trial evidence and national guidelines supporting the long-term use of beta-blockers in patients after myocardial infarction, fewer than half of myocardial infarction patients are prescribed beta-blockers in the outpatient setting. Patients with left ventricular dysfunction with or without heart failure symptoms are even less likely to receive this therapy. Physician reluctance to use beta-blockers after acute myocardial infarction may involve concerns regarding the safety and benefits of beta-blockers in post-myocardial infarction patients with left ventricular dysfunction with or without heart failure symptoms. Misunderstandings may persist regarding the safety and benefits of these agents in patients with diabetes, chronic obstructive pulmonary disease, and advanced age. Other concerns may include a perception of diminished benefits for patients receiving reperfusion/revascularization, ACE inhibitors, or statins.3-8

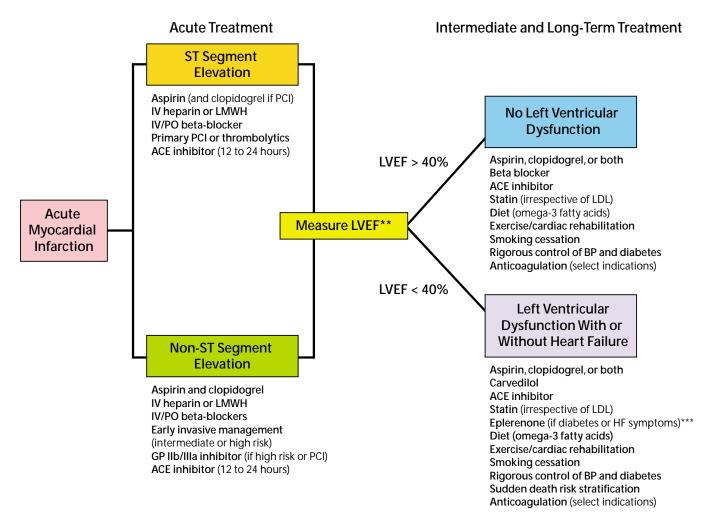
A recent clinical trial demonstrated significant

mortality reduction with beta-blocker therapy in post-myocardial infarction patients with left ventricular dysfunction compared with contemporary myocardial infarction care, including reperfusion therapy, antiplatelet therapy, ACE inhibitors, and lipid-lowering therapy. A substantial number of post-myocardial infarction patients, especially those with left ventricular dysfunction, do not receive beta-blockers. There is a significant opportunity to improve the use of this evidence-based therapy.

References

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Treatment Algorithm for Acute Myocardial Infarction With and Without Left Ventricular Dysfunction*



^{*}All patients without contraindications or intolerance.

Post-MI Consensus Guideline Committee, June 6th 2003.

The Post-Myocardial Infarction Guideline Committee: William T. Abraham, MD; Christopher P. Cannon, MD; Gregg C. Fonarow, MD; Mihai Gheorghiade, MD; Jonathan D. Sackner-Bernstein, MD; James E. Udelson, MD A more detailed and expanded document providing guidance regarding the initiation and long-term use of beta-blocker therapy for post-myocardial infarction patients will be published in a supplement to *Reviews in Cardiovascular Medicine* mailing in fall 2003.

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^{**}Include ischemic risk stratification if not previously catheterized (ie stress testing).

^{***}Not yet approved for this indication.