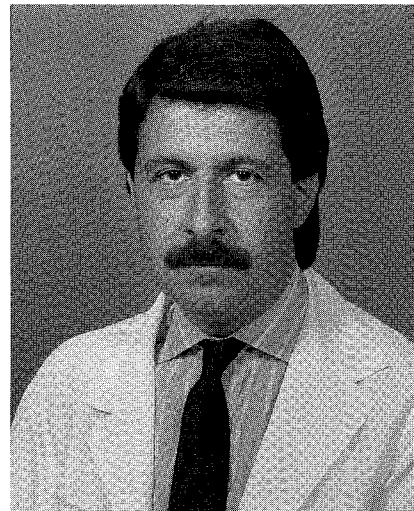


Prevention of Acute MI and Start-to-Finish Treatment: A Managed Care Perspective—*Introduction*

Based on comments by Conference Co-Chairmen William H. Frishman, MD, and Mihai Gheorghiade, MD



William H. Frishman, MD
Professor and Associate Chairman
Department of Medicine
Albert Einstein College of Medicine
Bronx, New York



Mihai Gheorghiade, MD
Professor of Medicine
Associate Chief of Cardiology
Northwestern University Medical School
Chicago, Illinois

Proceedings in this Special Report supplement to *The American Journal of Managed Care* contain edited highlights from a roundtable discussion on preventing and treating acute myocardial infarction (MI).

Clearly, there have been major breakthroughs in all areas of heart disease management during the past 25 years and additional information is becoming available almost daily, creating pharmaceutical, surgical, and diagnostic advances. There has been a noticeable shift of focus from treatment after the fact to the prevention of cardiac events. Because of the tremendous amount of in-

formation that is being disseminated, it is important to try to put everything in some sort of logical and useful order so that clinical decision makers within managed care organizations have a better understanding of current thinking on the best ways to prevent heart disease in patients at risk and to manage those who have already manifested cardiac disease.

The participants in this roundtable discussion were chosen specifically because of their diverse backgrounds and areas of expertise in the treatment of cardiovascular disease. These representatives from the fields of managed care, pharmacy, general medicine, medi-

cal research, cardiology practice, and cardiology research have gathered to review the current information and suggest appropriate approaches to both the prevention and treatment of acute MI. This symposium is especially important now, in light of the recent release of the American College of Cardiology and American Heart Association guidelines for the management of acute MI.¹ Discussions within these pages often refer to these guidelines, incorporating additional information from important trials pertaining to specific aspects of MI prevention and management.

This Special Report starts with a thorough discussion of primary prevention, then moves on to the management of acute MI, followed by a discussion of secondary preventive measures. In each instance, the major recommended management strategies are addressed and evaluated according to the evidence of their utility. The end product is a set of coherent suggestions for the course of treatment. In addition to highlighting coronary disease, there is some discussion of congestive heart failure and its management, since it relates closely to MI as a major consequence for survivors.

However, before talking about the prevention and management of acute MI, it is important to review the pathophysiology of such an event. Research shows that everything surrounding an acute MI is probably related to plaque rupture. Therefore, if we are going to target preventive therapy or the management of an acute event, we must first understand the factors that cause the plaque to rupture. Data show that approximately one-fourth of patients who die from an acute MI do so before reaching the hospital.² Therefore, it is much better to prevent a heart attack than to treat one—hence the various medications or interventions that can prevent an MI from occurring are analyzed. Since most patients have several factors that can lead to plaque rupture, strategies to prevent rupture is the primary focus of discussion. The management techniques that can be employed to slow

ACRONYMS LIST

The following acronyms are used in this supplement.

4S	Scandinavian Simvastatin Survival Study
ACC	American College of Cardiology
ACE	angiotensin converting enzyme
ACP	American College of Physicians
AHA	American Heart Association
ALLHAT	Antihypertensive and Lipid Lowering Treatment to Prevent Heart Attack Trial
BASIS	Basel Antiarrhythmic Study of Infarct Survival trial
CAD	coronary artery disease
CARE	Cholesterol and Recurrent Events trial
CARS	Coumadin Aspirin Reinfarction Study
CASS	Coronary Artery Surgery Study
CAST	Cardiac Arrhythmia Suppression Trial
CHAOS	Cambridge Heart Antioxidant Study
CHF	congestive heart failure
CONSENSUS	Cooperative New Scandinavian Enalapril Survival Study
DAVIT	Danish Study Group on Verapamil in Myocardial Infarction Trial
ECG	electrocardiogram
GISSI	Gruppo Italiano per lo Studio della Sopravvivenza nell'Infarto Miocardico
GUSTO	Global Utilization of Streptokinase and Tissue Plasminogen Activator for Occluded Coronary Arteries
HDL-C	high-density lipoprotein cholesterol
HEART	Healing and Early Afterload Reducing Therapy study
HOPE	Heart Outcomes Prevention Evaluation
INR	international normalized ratio
ISIS	International Study of Infarct Survival
JNC-V	Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure—Report 5
LDL-C	low-density lipoprotein cholesterol
LVH	left ventricular hypertrophy
MDPIT	Multicenter Diltiazem Postinfarction Trial
MI	myocardial infarction
MIAMI	Metoprolol in Acute Myocardial Infarction
MITI	Myocardial Infarction Triage and Intervention project
NHANES	National Health and Nutrition Examination Surveys
PAMI	Primary Angioplasty in Myocardial Infarction
PEACE	Prevention of Events with Angiotensin Converting Enzyme inhibitors
PRAISE	Prospective Randomized Amlodipine Survival Evaluation study
SAVE	Survival and Ventricular Enlargement trials
SHEP	Systolic Hypertension in the Elderly Program
SOLVD	Studies of Left Ventricular Dysfunction
SPAF	Stroke Prevention in Atrial Fibrillation
SWIFT	Should We Intervene Following Thrombolysis
TIMI	Thrombolysis in Myocardial Infarction
TOPS	Treatment of Post-Thrombolytic Stenoses
TOMHS	Treatment of Mild Hypertension Study

plaque progression after an event has occurred is the second issue.

Mechanical factors, endothelial function, the cholesterol content of the plaque, and perhaps viral factors can lead to plaque rupture.³ Whether a beta blocker, angiotensin converting enzyme (ACE) inhibitor, or a lipid-lowering agent is used, plaque-stabilizing treatment should be aimed at the specific process that is likely to cause plaque rupture. It seems each day brings forth new literature or new therapies to treat heart disease—the rapid pace of such revelations makes it very difficult to keep track of sometimes conflicting data. The community physician, who is closest to the patient, needs to know the specifics of treating cardiovascular patients. Instead of warning physicians that definitive data is not yet available, it could be extremely helpful to suggest recommendations, including the types of medications and interventions to try.⁴ The information reviewed in this supplement will provide a comprehensive overview of the approaches available.

... REFERENCES ...

1. Ryan TJ, Anderson JL, Antman EM, et al. ACC/AHA guidelines for the management of patients with acute myocardial infarction: A report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Management of Acute Myocardial Infarction) *J Am Coll Cardiol* 1996;28:1328-1428.
2. American Heart Association. *Heart and Stroke Facts 1996. Statistical Supplement*. Dallas, TX: American Heart Association, 1996:1-23.
3. Fuster V, Gotto AM, Libby P, Loscalzo J, McGill HC. Task Force 1. Pathogenesis of coronary disease: The biologic role of risk factors. *J Am Coll Cardiol* 1996;27:964-1047.
4. Hennekens CH, Albert CM, Godfried SL, Gattano JM, Buring JE. Adjunctive drug therapy of acute myocardial infarction: Evidence from clinical trials. *N Engl J Med* 1996;335:1660-1667.