Percutaneous Intervention of Acute MI

When a patient presents with acute MI, mechanical and pharmacologic means of intervention must be immediately set into motion. We are all challenged by the 90-minute door-to-balloon time goal, the choice of stent type, and the use of antiplatelet and other adjuncts to this therapy. This issue of *Cardiac Interventions Today* delves into each aspect of treating acute MI by calling on the experts to share their insights.

Eric R. Bates, MD, opens our issue with an overview of the updated 2007 STEMI Guidelines published by the American College of Cardiology/American Heart Association task force. Because of evolving data or opinion, nine major areas were selected for updated recommendations: analgesia, beta-blockers, logistics of care, facilitated PCI, rescue PCI, elective invasive strategy, anticoagulants, thienopyridines, and secondary prevention.

Time is of the essence when patients present with STEMI. Because the time from onset of symptoms is often difficult to ascertain because the patient may not be able to report it, our most reliable measure is the door-to-balloon time. Marc C. Newell, MD; Joseph A. Browning, MD; David M. Larson, MD; and Timothy D. Henry, MD, discuss the benefit of tracking our door-to-balloon times and they explain steps we can take at our institutions to optimize and quicken our response.

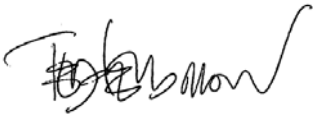
Cardiogenic shock is a complication observed in patients who present with acute MI that carries a mortality rate up to 90%. Amar R. Chadaga, MD, and Timothy A. Sanborn, MD, discuss the pros and cons of current interventional techniques and warn that, although the SHOCK Trial demonstrated the possibility of improved long-term outcomes, these patients still face an extremely high mortality rate. The authors stress the importance of strictly observing the Guidelines and improving coronary hemodynamics.

Pharmacologic agents play a key role during acute MI intervention. Kent G. Meredith, MD, and Peter J. Casterella, MD, provide a two-pronged review of pharmacologic agents used to assist and support reperfusion. They highlight the agents used to affect the hematological aspects of the procedure and then explain the agents affecting hemodynamics. They cap the discussion with a look at adjunct pharmacology, such as opiate analgesics, insulin infusion, and statin therapy.

The current role of CTA in clinical cardiology is the subject of our Imaging article by Sunil Mirchandani, MD, and James K. Min, MD. The authors highlight the safety and efficacy of CTA compared to invasive angiography as well as its cost effectiveness compared to today's noninvasive alternatives. Patient selection, they stress, will be the continued key to the success of CTA.

An engaging interview with SCAI committee member and coronary expert Steven R. Bailey, MD, caps our issue. He discusses simulation training in interventional cardiology, indicates areas of cardiology that will need the most attention from physicians and industry in the next several years, and describes the invasive cardiology lab at the University of Texas Health Science Center, including its door-to-balloon program.

We hope you find this issue of *Cardiac Interventions Today* to be a useful, practical, and thoughtful discussion of percutaneous coronary interventions for acute MI. ■



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