

STEMI in Focus; Structural Imaging



Ischemic heart disease represents the main cause of death in Western countries. Within its different clinical manifestations, ST-segment elevation myocardial infarction (STEMI) represents the most important clinical scenario, with the highest mortality and with many clinical dilemmas. During the last years, we have learned, for example, about primary percutaneous coronary intervention, how to organize a STEMI network to ensure timely treatment, and which is the best stent to implant to reduce subsequent clinical events. In recent years, attention has been focused on areas of clinical interest with many clinical studies. We have tried to identify them to provide you with the latest clinical evidence directly from authors who have worked extensively in the field.

We begin our exploration of STEMI with a review of the available anticoagulant and antiplatelet agents for treating STEMI patients undergoing primary percutaneous coronary intervention. Dominick J. Angiolillo, MD, and Francesco Franchi, MD, detail the various options and discuss the data for each.

Manel Sabaté, MD; Teresa López-Sobrino, MD; and Salvatore Brugaletta, MD, discuss cardiogenic shock in STEMI and explore the current trends in management and the use of mechanical circulatory support devices.

Although complete revascularization is becoming the gold standard for the treatment of patients presenting with STEMI and multivessel disease and without cardiogenic shock, the optimal timing to perform complete revascularization remains unclear. Paola Scarparo, MD, and Roberto Diletti, MD, take a look at when and how

to leave revascularization incomplete and when to revascularize nonculprit lesions.

There is an unmet need of effectively targeting coronary microvascular obstruction to improve clinical outcomes. Rocco A. Montone, MD, and Filippo Crea, MD, discuss the diagnosis, prognosis, and treatment of this important therapeutic target in patients with STEMI undergoing primary percutaneous coronary intervention.

In the world of transcatheter interventions, much needs to be learned to advance the field of structural interventional imaging. Intraprocedural and periprocedural imaging in transcatheter tricuspid interventions remains a challenging endeavor. Richard Y. Bae, MD, provides an overview of the key anatomic landmarks and critical views required when screening for transcatheter tricuspid valve repair. With every mitral intervention, there may be a concurrent need for left atrial appendage closure. Imagers are an important part of the implanting team in these procedures, especially when the imager and device operator understand each other well. Mohamad Alkhouli, MD, and Akram Kawsara, MD, share what they wish their imager would teach them about the left atrial appendage by exploring how coordination between the imager and operator can refine the left atrial appendage occlusion procedure.

In our Today's Practice column, Joel Sauer, MBA, and Ginger Biesbrock, PA-C, MPH, MPAS, AACC, explain that when it comes to open-door access, culture matters.

We close with an interview with Mayra Guerrero, MD, who discusses the importance of female representation in cardiology, how COVID-19 has impacted her cath lab, and an update on the MITRAL trial.

We hope that you find this issue of *Cardiac Interventions Today* to be a useful resource in your practice. ■

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