

PCI in Practice and Update on Mechanical Circulatory Support



It has been a tumultuous period for interventional cardiology. However, from ORBITA to ISCHEMIA (and the ongoing controversy regarding the EXCEL trial), with

each new piece of evidence that arises, we continue to learn. Ultimately, our ability to adapt to a changing landscape is essential for us to continue to deliver the best care to our patients. In this issue of *Cardiac Interventions Today*, we bring you fully up to date with the latest developments in the percutaneous treatment of stable coronary artery disease from experts in the field.

To open our focus on percutaneous coronary intervention (PCI), Yousif Ahmad, MD, presents an overview of recent data on left main coronary artery disease treatment, including the NOBLE and SYNTAX trials, as well as the EXCEL 5-year data and ensuing controversy.

Next, Michael Foley, MBBS, and Rasha Al-Lamee, MRCP, review data from the recent ORBITA and ISCHEMIA trials, including the impact on treatment decision-making and where future research efforts should focus next.

Francesco Gallo, MD; Francesco Ponticelli, MD; Antonio Colombo, MD; and Francesco Giannini, MD, then describe novel nonpharmacologic treatment strategies to consider for patients with refractory angina pectoris to reduce angina symptoms and improve quality of life.

Cardiac catheterization has progressed to encompass a wide range of interventional procedures, including coronary, endovascular, and structural heart disease interventions. In recent years, our understanding of cardiogenic shock physiology, as well as management, has changed, especially in the era of percutaneous mechanical circulatory support (MCS) options that we have now. MCS devices are currently used for high-risk intervention and cardiogenic shock due to right, left, or biventricular ventricular failure. This issue also covers the indications, management, and new use of MCS devices in patients presenting for

high-risk intervention or cardiogenic shock. In our first article, Mohamed Omer, MD; Ilias Nikolakopoulos, MD; Evangelia Vemmou, MD; Iosif Xenogiannis, MD; Michael Megaly, MD; and Emmanouil S. Brilakis, MD, discuss the management of temporary MCS, including various factors involved in adequate patient monitoring and the available devices and advice for troubleshooting when difficulties arise. Catalin Toma, MD; Michael Jolly, MD; and Christopher Huff, MD, then review the appropriate role of MCS in treating patients with massive pulmonary embolism and the expertise required to manage this therapy.

Next, Navin K. Kapur, MD, examines the role of infarct size on the outcomes and treatment decisions for patients with ST-segment elevation myocardial infarction (STEMI) and shares the background of the STEMI-DTU research program and pivotal trial, with hopes that new data will improve patient outcomes.

Finally, Mir Babar Basir, DO, and William W. O'Neill, MD, review the options for MCS and the key questions operators must ask to ensure they are matching the right device to each patient.

In addition to these featured topics, we also have a coding and reimbursement article by Terri McDonald, RN, who shares tips for those seeking to move toward providing outpatient elective PCI in an ambulatory surgical center. Finally, we close this issue with an insightful discussion with Toniya Singh, MBBS, about her role as Chair of the National Women in Cardiology section of the American College of Cardiology, championing of female patients and physicians in the cardiology field alike, and more.

We hope that this issue of *Cardiac Interventions Today* provides an interesting and useful discussion of topics at the forefront of our field. As always, we invite you to share any feedback or suggestions you may have about the publication (@cardiacinterv; citeditorial@bmctoday.com). ■

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