Meeting the Challenge...



As interventional cardiologists, we often learn the most from discussing a case and remembering images of a particular case. Indeed, although guidelines help with the management of many clinical problems, they don't always tell us how to manage challenging patients that we see in our

daily clinical practice and that often fall outside of the guidelines. This is why we continue to dedicate an entire issue to the discussion of challenging clinical cases. As you read the cases presented in this issue, think about how you would have managed the patient and please feel free make different suggestions or comments via Twitter (@cardiacintery).

In this years' challenging scenarios issue, 26 physicians have stepped up to answer the question, "What would you do?" when presented with a clinical scenario from one of nine specialties presented by our venerated moderators. These cases tackle challenges related to aortic, mitral, and tricuspid valves; patent foramen ovale (PFO) closure; radial and femoral access; percutaneous coronary intervention (PCI), including both left main and bifurcation procedures; and the treatment of heart failure. The panelists' answers showcase the varied approaches and technologies available to treat these challenges as well as the rationale for their decision-making.

We open with three different cases addressing challenging aortic, mitral, and tricuspid valve scenarios. Moderator Matias Sztejfman, MD, presents a case to Guilherme Attizzani, MD; Cristian Baeza, MD; Hemal Gada, MD; Anthony Main, MD; and Henrique Barbosa Ribeiro, MD, on whether transcatheter aortic valve replacement is appropriate for a patient with small aortic anatomy. Then, Wojciech Wojakowski, MD, asks Anita W. Asgar, MD; Haim Danenberg, MD; Thomas Modine, MD; and Pavel Overtchouk, MD, if urgent intervention is necessary for a patient with severe mitral insufficiency and left ventricular wall perforation. Rounding out the valve cases, Edwin C. Ho, MD, gathers Neil P. Fam, MD; Rebecca T. Hahn, MD; and Maurizio Taramasso, MD, to evaluate a case of severe symptomatic functional tricuspid regurgitation after a previous left-sided valve replacement.

We then have two cases highlighting access-related challenges. For our radial access case, Mirvat Alasnag, MD, asks James Nolan, MD; Sunil Rao, MD, and Binita Shah, MD, how they evaluate their patients' bypass grafts, particularly in those with an arteriovenous fistula. Then, Sanjog Kalra, MD,

queries Sean Janzer, MD; Rajiv Tayal, MD; and Grace J. Wang, MD, on their access plan in a case requiring recanalization of a left main coronary artery chronic total occlusion (CTO).

Next, panelists Yashu Dhamija, MD; Abdul Moiz Hafiz, MD; Ankur Kalra, MD; and Anmar Kanaa'N, MD, tackle a case from moderator Mohamad Alkhouli, MD, on the potential for PFO closure to prevent further paradoxical embolization.

The focus then shifts to challenges related to PCI. Rui Campante Teles, MD, walks through a case with James W. Choi, MD; Laurent Drogoul, MD; and Pedro de Araújo Gonçalves, MD, that emphasizes the role of PCI in a complex bifurcation CTO. Moderator Elvin Kedhi, MD, then asks Renicus Suffridus Hermanides, MD; Duane Pinto, MD; and Alejandro Ricalde, MD, to weigh the factors for a high-risk PCI of a left main bifurcation in a patient with acute coronary syndrome and low ejection fraction.

We conclude our challenging case feature with Snehal R. Patel, MD, leading a discussion on acute ischemic mitral regurgitation and cardiogenic shock with Rita A. Jermyn, MD; Mahek Shah, MD; and A. Reshad Garan, MD.

Elsewhere, be sure to check out the rest of our issue coverage in our Techniques, Today's Technology, and Today's Practice articles. Finally, we conclude with our featured interview with Prof. Ulrich Schäfer, MD, who provides a discourse on the current state of available therapies for all four heart valves and new technologies to treat heart failure, among other topics.

As you will note from the responses from the expert panelists, the approach to a case can often be very different, highlighting the importance of case discussion in clinical practice. We should all take from this the importance of discussing challenging and complex cases with colleagues before proceeding with the intervention. I'm often surprised in my own practice about how case discussion, especially with a colleague from a different specialty, may give me an idea for a novel approach to a complex problem. We hope that the format of this issue will encourage you to do the same in the future and, as a result, will improve patient care and clinical outcomes. In the end, irrespective of where in the world we work, we are a community facing similar problems and challenges, and discussion brings us together and allows us to share our clinical experience and ideas.

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