Multivessel Interventions

The controversy surrounding drug-eluting stents (DESs) has eclipsed many other important topics for over a year. One of these is the role of multivessel intervention. In this issue of *Cardiac Interventions Today*, we review a number of facets of percutaneous coronary intervention (PCI) for multiple vessels.

Michael Mack, MD, reflecting the surgical point of view, acknowledges that, although DESs have made PCI more attractive than the traditional surgical approach and are the optimal choice for some patients, surgery will continue to have an integral role. To help us make that choice, Dr. Mack provides some patient-specific factors that may indicate coronary artery bypass grafting (CABG) over PCI. Next, Daniel W. Carlson, MD, and Mark A. Turco MD, weigh in on the role of stenting in multivessel disease with data from large registries comparing the performance of PCI with drug-eluting and bare-metal stents to CABG. While our community awaits data from the SYNTAX, FREEDOM, and VA CARDS trials to shed more light on stenting, the authors acknowledge registry results suggesting that CABG remains the standard of care.

Morton J. Kern, MD, understands that physicians are faced with many questions when deciding whether to stent multiple lesions. Dr. Kern supports ischemia-directed revascularization and points out that selecting the lesion to stent based on coronary pressure measurements has yielded better results than stenting all lesions. He presents a compelling rationale for physiologic lesion assessment and advocates using fractional flow reserve measurements to aid in decision making.

In his article, "Incomplete Revascularization," James R. Margolis, MD, suggests we call to mind Andreas Gruentzig's paradigm of using PCI to treat single-vessel disease when we treat multivessel disease today. Margolis advocates performing PCI in multiple stages for select patients when the goal of total revascularization is not achievable.

We also feature a transradial intervention roundtable discussion among Gerald Barbeau, MD; Tift Mann, MD; and Jeffery J. Popma, MD, who address the advantages and disadvantages of radial access, how physicians can obtain radial training, and why radial access lags in the US.

Our imaging expert this month, David A. Dowe, MD, describes ultra-low radiation dose, prospectively gated coronary CTA, called *PG-CCTA*, an imaging modality available to a majority of patients receiving CCTA that has the potential for quadruple rule-out scanning. PG-CCTA administers a very low radiation dose and requires a heart rate <65 bpm, which is easily achievable with beta blockers.

Finally, we are pleased to feature an interview with John D. Carroll, MD, a leading cardiologist who discusses his present research and projects including imaging modalities, using a patient's CT and MR scans to create computer and physical cardiac models, and the link between patent foramen ovale and migraines.

I hope you find this issue of *Cardiac Interventions Today* to be a useful and informative investigation into multivessel interventions. ■

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Chief Medical Editor