Mitral & Tricuspid Transcatheter Therapies





Transcatheter aortic valve interventions have become an established therapy for aortic stenosis, and as a result, the focus of cardiologists, surgeons, radiologists, industry, and innova-

tors has shifted toward another unmet clinical need, the atrioventricular valve. The tricuspid and mitral valves share many embryonic, anatomic, and structural similarities, as well as a pathophysiologic interdependence. An unfortunate similarity is that many patients with regurgitant mitral and tricuspid disease do not undergo correction of their valvular disease, mostly due to the lack of a less invasive transcatheter option. The increased focus on percutaneous mitral and tricuspid interventions has resulted in numerous innovative therapies that will require new skill sets, dedicated imaging protocols, and a toolbox approach to the management of a complex valve in a complex group of patients. In this issue, we hope to provide an introduction to this rapidly growing field.

First, Rebecca T. Hahn, MD, presents a thoughtful review of the factors that should be considered to properly image the tricuspid valve anatomy, from the initial anatomic evaluation through the steps of transcatheter treatment. Christopher U. Meduri, MD; Vivek Rajagopal, MD; Mani A. Vannan, MBBS; Kari Feldt, MD; and Dr. Latib then provide an update on the current status of transcatheter therapies that are being developed to treat tricuspid regurgitation, including an overview of the unique anatomic challenges, the aforementioned importance of proper imaging protocols, as well as increasing awareness of this disease and the opportunity that new therapies can offer.

On the mitral valve side, Dale J. Murdoch, MBBS; Robert H. Boone, MD; Robert Moss, MBBS; John Webb, MD; and David A. Wood, MD, describe the current status of transcatheter mitral valve repair, including an update on current studies in patients with primary and secondary mitral regurgitation and the devices used to treat them. Next, Robert Schueler, MD, and Jan-Malte Sinning, MD, focus on the current options for mitral annuloplasty and leaflet

repair. Rahul Sharma, MD, and Sameer Gafoor, MD, then share their insights on what the next big technologies will bring to the percutaneous mitral valve arena. These three articles present the most recent data available to date for these devices that have either been approved or are undergoing study and development.

In addition to our coverage on the mitral and tricuspid valves, we have a few articles that touch on a range of topics in our field. In the area of Coding & Reimbursement, Larry Sobal, MBA, discusses the transition to value-based care and a look at how that process is actually playing out in today's practice. Jessica Tilton, PharmD; John Shilka, PharmD; Adhir Shroff, MD; and Vicki Groo, PharmD, provide a helpful overview of the latest anticoagulation methods for left atrial appendage closure with the Watchman device (Boston Scientific Corporation).

In a Valve Update, Jason H. Rogers, MD; Ganesh Manoharan, MD; and Issam D. Moussa, MD, engage in a roundtable discussion on the challenges heart teams are facing, including expanding their clinics from a main focus on transcatheter aortic valve replacement (TAVR) to the inclusion of emerging transcatheter therapies for structural heart interventions to offer more choices to these patients. Last, we close this issue with an interview with Neil Moat, FRCS, about his research on valvular therapies, the evolving TAVR population, and much more.

Catheter therapy for mitral and tricuspid disease is developing rapidly, and the literature is voluminous and fragmented. As is always our goal, we hope that this collection of reviews will bring this literature together in an up-to-date and synthesized manner. We hope you enjoy this issue and hope you will let us know about future topics you would like to see covered.

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