## Preface Advances and Controversies in the Management of Mitral Valve Disease





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Mitral regurgitation (MR) is among the most common valvular heart disorders. MR is classified as primary when it is due to a structural or degenerative abnormality of the valve, and secondary or functional MR occurs as a result of from left ventricular dysfunction or left atrial enlargement. While the surgical outcome has improved significantly over time for severe degenerative MR irrespective of symptoms, severe functional MR in patients with heart failure continues to be associated with poor outcomes from either ischemic or nonischemic cause. Determination of the mechanism of MR is paramount when formulating a treatment strategy because optimal management may differ depending on the underlying cause. Thus, a better understanding of the pathophysiology of each subset of patients with MR may have implications for treatment.

Despite recent advances in the catheter-based technologies, guideline-directed medical therapy (GDMT) remains the first-line management for symptomatic patients with MR, especially for functional MR. Although numerous nonrandomized studies have demonstrated high procedural success rates and good clinical outcomes with MitraClip repair in patients with symptomatic MR, the results of randomized controlled trial evaluating MitraClip repair versus GDMT are pending. In addition to the degenerative and functional MR, MR caused by infective endocarditis (IE) is the utmost important clinical entity. The epidemiologic profile of IE has changed in recent decades, and early surgery is recommended in patients with complicated IE; however, its implementation in real-world clinical practice is still debated.

The overall goal of this special issue is to provide contemporary approaches and emerging surgical and interventional techniques in the evaluation and treatment of mitral valve disease. In this special issue, we would like to provide contemporary medical and diagnostic approaches, as well as emerging surgical and interventional techniques in the evaluation and treatment of mitral valve disease. The topics included in this special issue are advances in conventional surgical techniques, minimal invasive and robotic surgery and transcatheter mitral intervention in degenerative and functional MR, controversies regarding the timing of surgery in asymptomatic severe degenerative MR and active IE, and contemporary medical therapy directed at degenerative MR and functional MR in heart failure.

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