Atrial fibrillation and successful transcatheter mitral valve repair using MitraClip

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Abstract

Ledwoch and colleagues demonstrated in their article entitled “Impact of transcatheter mitral valve repair using MitraClip on right ventricular remodeling” that right ventricular function improved in most of the patients following MitraClip implantation whereas 20% of them experienced worsening of right ventricular function which associated with worse prognosis, despite the latter cohort achieved comparable improvement in the mitral regurgitation. Given most of the latter cohort had atrial fibrillation, aggressive catheter ablation to improve atrial fibrillation before or after MitraClip implantation might reverse left atrial function as well as improving biventricular function and long-term prognosis.

Keywords Heart failure · Valve disease · Intervention · Mitral regurgitation

To the editor

Ledwoch and colleagues investigated the impact of MitraClip implantation on right ventricular function and its association with clinical outcomes [1]. They demonstrated that MitraClip improved right ventricular function in the majority of patients, who enjoyed better prognosis. It is surprising that 20% of patients rather experienced a decline in right ventricular function together with reduced left ventricular ejection fraction and left atrial function and unchanged systolic pulmonary artery pressure, which resulted in poor prognosis, despite successful MitraClip procedure with regard to the comparable residual mitral regurgitation to those with improved right ventricular function [1]. The next concern is what we should do considering their findings.

The majority of the patients with worsened right ventricular function had atrial fibrillation in their study [1]. As they suspected, atrial fibrillation might be a key to reduce the benefit of improvement in mitral regurgitation by the MitraClip therapy. Aggressive catheter ablation to improve atrial fibrillation before or after MitraClip implantation might

reverse left atrial function as well as improving biventricular function and long-term prognosis.

Compliance with ethical standards

Conflict of interest Author declare that he has no conflict of interest.

Ethical statement The manuscript does not contain clinical studies or patient data.

Reference

1. Ledwoch J, Fellner C, Hoppmann P, Thalmann R, Kossmann H, Dommasch M et al (2020) Impact of transcatheter mitral valve repair using MitraClip on right ventricular remodeling. *Int J Cardiovasc Imaging*. <https://doi.org/10.1007/s10554-020-01771-2>

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