What is the recommended approach for secondary mitral regurgitation?

Rezvanieh Salehi, Pourafkari L and Mazani S
Tabriz Medical University, Iran

Secondary mitral regurgitation (MR) occurs in the setting of normal mitral apparatus (leaflets, papillary muscles, and chords). Left ventricular (LV) enlargement in dilated and ischemic cardiomyopathy lead to stretch of mitral valve (MV) annulus and displacement of the papillary muscles which in turn causes secondary MR. The phenomenon is also known as functional MR (FMR) and has been associated with poor outcome. Correction of ensuing MR with surgical or with newly developed transcatheter approaches, however does not reverse the underlying LV pathology hence might not improve prognosis. The revisions made to the recently published American Heart Association (AHA)/ American College of Cardiology (ACC) guidelines on valvular heart disease (VHD) which changed the definition of secondary versus primary MR by reducing effective regurgitant orifice area (ROA) from 0.4 to 0.2 cm² and regurgitant volume (RV) from 60 to 30 ml creates considerable controversies. Redefining severe MR based on EOA or RV may cause significant clinical challenges. According to the guidelines, diagnosis of severe MR requires careful assessment of a constellation of clinical findings, in conjunction with echocardiographic and sometimes other imaging modalities. In case of FMR, ROA is crescentic rather than circular and measurements of PISA with 2D transthoracic echocardiography underestimate the true ROA. In revised new VHD guidelines, there is no class I indication for secondary MR intervention but considering already damaged LV and underestimation of MR severity early intervention seems to be reasonable. Mitral annuloplasty, mitral clip, Alfieri stitch and mitral cardio-band are various treatment methods that are currently being used.

Biography
Rezvanieh Salehi completed her Graduation from Tabriz Medical University in 1984 and passed a special course in Internal Medicine in 1989. She began to work in Tabriz Medical University as an Assistant Professor in 1989. She was an echocardiography fellow in Milan, Italy, in 2000, passed the EACRI exam in 2013, and National Board of Echocardiography in 2016. Now, she is working as a Professor of Cardiology and an Echo-Cardiologist at Shahid Madani Hospital, Tabriz Medical University.

salehiri2002@yahoo.com