First of all, thank you for your valuable comment and contribution.¹ Several factors must be considered to influence the grade of functional mitral regurgitation (MR). The regurgitation in the mitral and tricuspid valves may decrease or, in rare cases, increase after transcatheter aortic valve implantation.¹ The most common cause of increasing MR is mechanical dysfunction of the mitral valve post-implantation. In our case series, we did not observe an increase in MR. In the literature, many studies have reported that mitral regurgitation decreases and have provided reasons for this decrease.¹,² For example, the high prevalence of coronary artery disease (CAD) with consequent ischemic MR may account for left ventricular (LV) dilation observed in the late phase of aortic stenosis. Another factor contributing to the increased driving force through the regurgitation area is the marked increase in the LV-to-left atrial pressure gradient observed in severe aortic stenosis (AS). Thus, the possibility of mixed etiologies must be considered when assessing the severity of MR and its potential regression or worsening after TAVR.²,³

Whether the design of the implanted transcatheter heart valve influences the post-procedural course of mitral regurgitation needs to be delineated in future studies.

References