Letter to the Editor

Repair of chronic ischemic mitral regurgitation with posterior leaflet extension

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We read with great interest the review article ‘Chronic ischaemic mitral regurgitation — current treatment results and new mechanism-based surgical approaches’ by Bouma and colleagues in a past issue of this journal [1]. Management of severe ischaemic mitral regurgitation remains challenging with disappointing long-term surgical results. Furthermore, despite the increasing popularity of valve repair, its long-term durability in chronic ischaemic mitral regurgitation continues to be uncertain. In this article, the authors worked in an excellent manner to review the different mechanisms of ischaemic mitral regurgitation, and to describe the variety of surgical approaches used to deal with this entity.

To address leaflet tethering commonly observed in these patients, our group had recently reported the midterm results of posterior leaflet extension with a bovine pericardium, coupled with remodelling annuloplasty [2]. After extending the posterior leaflet height by about 1 cm from the medial half of P2 to the end of P3 in 44 consecutive patients with type IIIb ischaemic mitral regurgitation, the observed actuarial freedom from recurrent mitral regurgitation was 90% at 2 years. This also correlated with 90% of patients remaining in the New York Heart Association class I at 2 years. We believe that this is a relatively easy technique, safely reproduced, which can lead to good midterm results. Longer follow-up is necessary to assess the competency of the mitral valve and confirm the effectiveness of this approach.

References

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Reply to the Letter to the Editor

Reply to Atoui and de Varennes

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We thank Atoui and de Varennes for their interest and positive comments [1] regarding our review article [2]. We agree with them that, in their recently published article in ‘Circulation’ [3], a promising technique is described with good midterm results that would have been a valuable addition to Table 2 of our review [2]. However, their article was published after submission and acceptance of our review article.

The technique described by de Varennes and colleagues involves remodelling annuloplasty combined with augmentation of the posterior mitral valve leaflet height (medial half of P2 to the end of P3) with bovine pericardium to relieve mitral valve leaflet tethering in 44 patients with type IIIb grade 4+ chronic ischaemic mitral regurgitation (CIMR). The observed actuarial freedom from recurrent grade ≥3+ mitral regurgitation was 90% at 2 years.

Although there is debate about the relative importance of anterior and posterior leaflet tethering in CIMR recurrence, promising midterm results of anterior leaflet augmentation combined with annuloplasty have also been described in 25