



## Implication of Exercise Training in Patients With Aortic Stenosis

### To the Editor:

Arai et al demonstrated that an exercise training program could safely improve activities of daily living (ADL) in patients with severe aortic stenosis.<sup>1</sup> However, their paper raises several concerns.

The indications for transcatheter aortic valve replacement (TAVR) are expanding given that this technique is less invasive. Even patients with mild cognitive impairment or those who are frail can undergo TAVR without serious complications unless there is a definitive contraindication, such as other fatal comorbidities and the absence of appropriate approach sites.<sup>2</sup> TAVR can improve ADL in elderly patients.<sup>3</sup> Even in cases in which TAVR is not indicated, balloon aortic valvuloplasty, which is less invasive than TAVR, can also improve ADL. Do the authors have baseline Frailty Scale and Mini-Mental State Examination data? Patients receiving exercise training in the study of Arai et al may have been good candidates for TAVR or balloon aortic valvuloplasty.

One of the limitations of the study of Arai et al is the lack of a control group. A comparison of pretreatment and

on-treatment trends in the Functional Independence Measure would demonstrate the implications of exercise training.

Another concern is the impact of exercise training on cardiac function. The exercise training may have improved cardiac parameters, including left ventricular mass index and left ventricular ejection fraction, as well as tricuspid annular plane systolic excursion.

### Disclosures

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### References

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