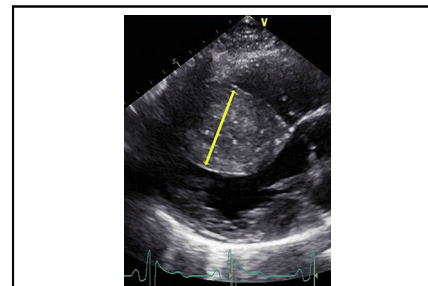


Reoperation for nonobstructive hypertrophic cardiomyopathy in a patient with extreme septal thickness



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Video clip is available online.



A 48-mm septum (double-headed arrow) shown on preoperative transthoracic echocardiography.

A 24-year-old male patient with familial hypertrophic cardiomyopathy presented with New York Heart Association class III heart failure. Two years earlier, he had undergone transaortic septal myectomy at another institution to relieve left ventricular outflow tract obstruction. However, his heart failure symptoms did not improve. On evaluation at our Clinic, transthoracic echocardiography confirmed nonobstructive hypertrophic cardiomyopathy. There was no left ventricular outflow tract gradient, but the left ventricular cavity size was small and the interventricular septum measured 48 mm (Figure 1, A). Left ventricular (LV) ejection fraction was 84%, and LV stroke volume index was 37 mL/m².

Transapical myectomy was performed to enlarge the LV cavity and eliminate any potential midventricular obstruction.¹⁻³ After the procedure, LV end-diastolic dimension increased from 30 to 43 mm (Figure 1, B), and cardiac index as estimated from transthoracic echocardiography increased from 2.7 to 3.4 L/min/m² (Video 1). The patient recovered well and was discharged on postoperative day 6.

Review by the institutional review board is not required. Informed consent has been obtained.

CENTRAL MESSAGE

Transapical myectomy can be useful to improve cardiac function in patients with nonobstructive hypertrophic cardiomyopathy and diastolic heart failure.

See Commentaries on pages 73 and 75.

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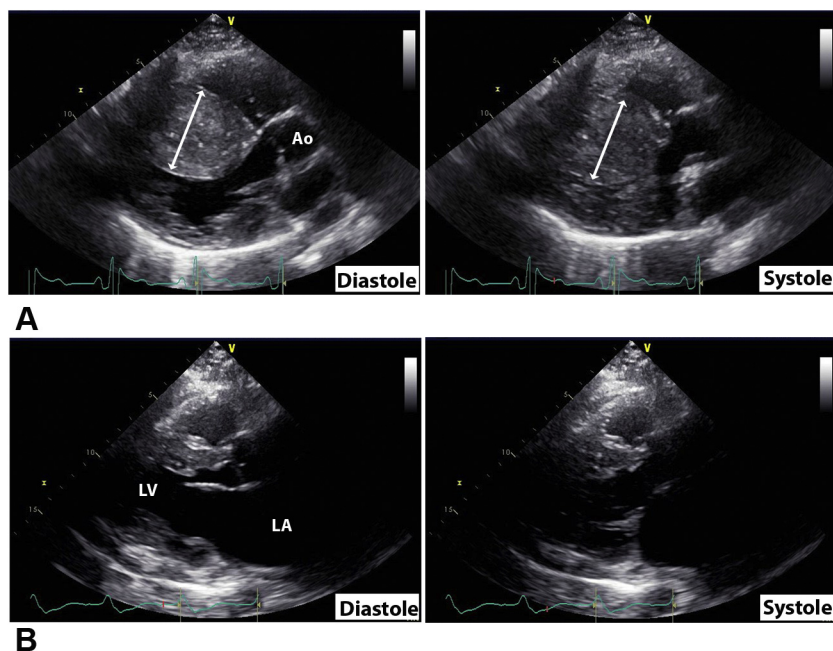
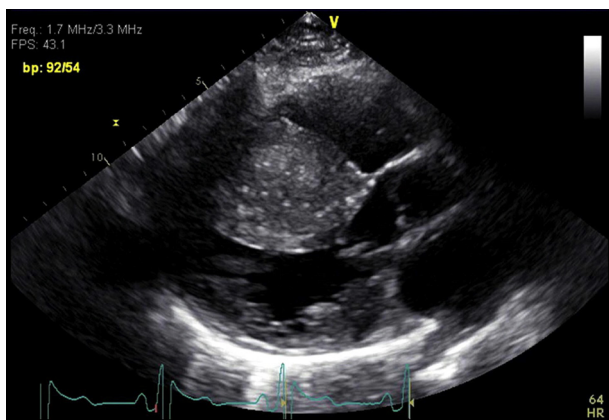


FIGURE 1. Parasternal long-axis view of the preoperative transthoracic echocardiogram (A) demonstrated a small left ventricular cavity with a maximum septal thickness of 48 mm (*double-headed arrows*). The LV cavity was significantly enlarged after transapical myectomy (B). Ao, Aorta; LV, left ventricle; LA, left atrium.



VIDEO 1. Parasternal long-axis view of preoperative and postoperative transthoracic echocardiogram. Video available at: [https://www.jtcvs.org/article/S2666-2507\(21\)00325-4/fulltext](https://www.jtcvs.org/article/S2666-2507(21)00325-4/fulltext).