

## IMAGES AND VIDEOS

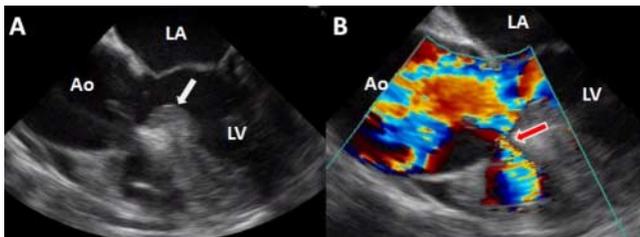
# A rare case of subarterial ventricular septum defect associated with other cardiac pathologies in an adult

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A 67-year-old woman developed exertional dyspnea. Echocardiography revealed a subarterial ventricular septum defect (VSD), hypertrophy of the basal septum leading to subvalvular obstruction, severe aortic regurgitation, and an ascending aorta aneurysm (Fig. 1, Videos 1 and 2). Surgical repair consisted of transaortic VSD patch closure, septal myectomy, and separate replacement of the aortic valve and the ascending aorta (Fig. 2).



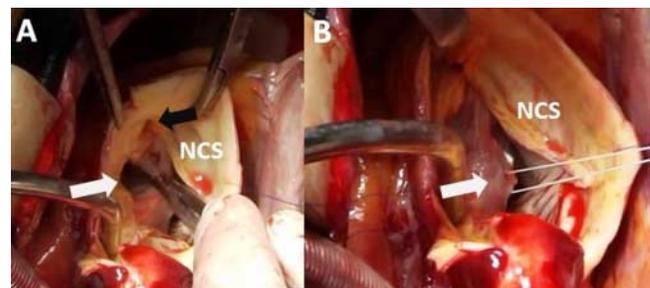
**Figure 1**  
Transesophageal echocardiogram (TEE). Two-dimensional TEE without (A) and with color (B) showing subarterial VSD (red arrow) and hypertrophy of the basal septum (white arrow) below the VSD. The defect was ~5 mm in size and hemodynamically benign as the pulmonary to systemic blood flow ratio ( $Q_p/Q_s$ ) was calculated from cardiac catheterization data to be 1.6:1. The ascending aorta was 58 mm in diameter and severe aortic valve regurgitation was present. Ao, ascending aorta; LA, left atrium; LV, left ventricle; VSD, ventricular septum defect.

### Video 1

Transesophageal echocardiogram (TEE). Two-dimensional TEE without color, showing subarterial VSD and hypertrophy of the basal septum below the VSD. Download Video 1 via <http://dx.doi.org/10.1530/ERP-14-0022-v1>.

### Video 2

Transesophageal echocardiogram (TEE). Two-dimensional TEE with color, showing subarterial VSD and hypertrophy of the basal septum below the VSD. Download Video 2 via <http://dx.doi.org/10.1530/ERP-14-0022-v2>.



### Figure 2

(A) At the time of operation, the VSD (white arrow) was larger (12×15 mm) than anticipated and was limited upstream by the semilunar valves, but was otherwise surrounded by muscle. The tricuspid aortic valve was excised due to severe calcification of the right coronary cusp. The defect lies beneath the right coronary cusp in the outlet septum. The ostium of the right coronary artery is indicated by the black arrow. (B) Transaortic visualization of the septal subaortic bulge (white arrow), narrowing the outflow tract before surgical septal myectomy (Morrow procedure). NCS, non-coronary sinus.

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**Declaration of interest**

The authors declare that there is no conflict of interest that could be perceived as prejudicing the impartiality of the research reported.

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