A 78-year-old woman was referred for progressive exertional dyspnoea and cardiac murmur. Transthoracic echocardiography revealed flow acceleration with turbulences beginning at the level of the left ventricular outflow tract (arrowhead, Panel A, Supplementary data online, Videos S1 and S2), without systolic anterior motion of the mitral valve. Maximal velocity and mean pressure gradient obtained from the apex were 4.3 m/s and 51 mmHg, respectively (Panel B). Aortic valve was thickened with mildly reduced opening. Transoesophageal echocardiography was performed to further characterize the obstruction, allowing visualization of a subaortic membrane 12 mm below the aortic valve (arrow, Panel C, Supplementary data online, Video S3). By 3D reconstruction and planimetry, the surfaces of the subaortic orifice and of the aortic valve were 0.56 and 1.45 cm², respectively (Panels D and E). Left heart catheterization demonstrated normal coronary arteries and catheter pullback from the left ventricular cavity revealed a 55 mmHg peak-to-peak subvalvular gradient (asterisk), without additional pressure gradient across the aortic valve (Panel F). The patient underwent uneventful surgical resection of the subaortic membrane (arrow, Panel G) and, because of a mild residual gradient, septal myectomy was also performed.

Whereas discrete subaortic stenosis is typically observed during the first decade of life as an isolated lesion or in association with other congenital heart diseases, it may, albeit infrequently, present during adulthood and mimic degenerative aortic stenosis or hypertrophic cardiomyopathy, making the diagnosis challenging. To the best of our knowledge, our patient is the second oldest ever reported with this diagnosis. This case illustrates the value of transoesophageal echocardiography to detect discrete subaortic stenosis and, by using 3D reconstructions, to further characterize its severity.

**Supplementary data** are available at *European Heart Journal - Cardiovascular Imaging* online.