A 33-year old woman presented with moderate dyspnoea on exercise. Transthoracic echocardiogram showed two eccentric jets of severe aortic regurgitation (AR). The left ventricle (LV) was dilated with preserved function (end-diastolic dimension of 58 mm and ejection fraction of 65%). Transoesophageal echocardiogram was performed, and aortico-left ventricular tunnel (ALVT) was seen originating from the non-coronary cusp (NCC). There were two different color Doppler jet (See in Panel F and Supplementary data online, video) The wall of the tunnel at the aortic side was close to the mitral-aortic intervalvular fibrosa (MAIVF). Given the LV dilation and the fact the patient was symptomatic, surgery was performed. After surgery, the patient’s symptoms resolved. An ALVT is a rare congenital disorder with an abnormal paravalvular communication between the aorta and LV. Commonly, the tunnel originates from the right CC. In our patient, there was an unusual origin from the NCC above the MAIVF. Surgical management is recommended for these congenital tunnels.

(Panel A) Aortic valve transoesophageal short-axis view. (Panel B) Transoesophageal long-axis view: left ventricular (asterisk) and aortic (double asterisks) end of the tunnel. (Panel C) Transoesophageal long-axis view: aortic end of the tunnel. (Panel D) Transoesophageal long-axis view: left ventricular end of the tunnel. (Panel E) Transoesophageal aortic valve short-axis colour Doppler view: flow in the tunnel (asterisk), central AR jet (double asterisks). (Panel F) Transoesophageal long-axis colour Doppler view: inflow of the tunnel (asterisk), central AR jet (double asterisks), and outflow of the tunnel (triple asterisks).

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