left ventricular longitudinal functional reserve during exercise in patients with hyper-
23. Maron MS, Olivatto I, Betocchi S, Casey SA, Lesser JR, Losi MA et al. Effect of left ventricular outflow tract obstruction on clinical outcome in hypertrophic cardio-

Incidental finding of an univentricular heart on echocardiogram in an adult patient

Neeraja Yedlapati and Nassim R. Krim*

Cardiology Department, Cardiac Catheterization Laboratory, Bronx Lebanon Hospital and Medical Center, Albert Einstein College of Medicine, 1650 Grand Concourse, 12th Floor, Bronx, NY 10457, USA
* Corresponding author. Tel: +1 17185185222, E-mail: nakrim@bronxleb.org

A 23-year-old asymptomatic female was sent for an echocardiogram because of a loud murmur heard on auscultation. She never had any cardiac surgeries and reported good exercise tolerance. Echocardiogram revealed a double inlet left ventricle (DILV) with two separate atrio-ventricular (AV) valves opening into a single large morphological left ven-
tricle (Panels A and B; see Supplementary data online, Videos S1–S3) that is separated from a hypo-
plastic right ventricle by a large unrestricted bulbo-
ventricular foramen. Aorta is positioned anteriorly and to the left of pulmonary artery (PA) displaying L transposition. Severe stenosis (peak gradient 100 mmHg) of the hypoplastic pulmonic valve was present (Panels C–F; see Supplementary data online, Video S4).

It has been recognized that DILV patients may have ‘favourable’ and ‘unfavourable’ streaming based on the degree of stenosis to the outflow tract and the AV valves. Patients with ‘favourable’ streaming have a well-balanced circulation that is possible with an unobstructed systemic outflow and moderate-to-severe pulmonarystenosis that keeps them asymptomatic until later part of life. They have a preferential flow of the systemic venous blood to the PA and pulmonary venous blood to the aorta unlike patients with AV stenosis and restriction to the aortic outflow tract. Saturation in the PA is usually lower in these patients. Similar haemodynamics was observed in our patient that per-
mittted her to have good functional capacity for years. In a recent review, 6 (3%) of 196 univentricular patients were found to have DILV- L transposition signifying the rarity of this condition. Very few of these DILV-L loop patients have this kind of favourable circulation.

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

Published on behalf of the European Society of Cardiology. All rights reserved. © The Author 2014. For permissions please email: journals.permissions@oup.com.