A 51-year-old man with a history of type B aortic dissection presented with bilateral lower extremity edema and dyspnea, which fit New York Heart Association (NYHA) functional classification II. Chest radiography revealed cardiomegaly, and laboratory data was normal, except for an increased serum level of N-terminal pro-brain natriuretic peptide of 2348 pg/mL (upper reference limit: 400 pg/mL); therefore, the patient underwent cardiac workup. The electrocardiogram result was unremarkable (Supplemental material online, Figure 1).

Echocardiography revealed significant dilatation of the left main trunk in addition to moderate left ventricular dilatation (left ventricular end-diastolic and systolic diameters of 56 mm and 42 mm, respectively) with a slightly reduced ejection fraction of 44%, right ventricular enlargement, and a small atrial septal defect with a size of 7 mm. Abnormal diastolic flow inside the left ventricle was also detected by color Doppler study (Panel A, Supplementary material online, Movie_1). Coronary computed tomography angiography revealed giant left and right coronary arteries (Panels B-D) with fistulas draining into the left and right ventricular cavities, respectively (Supplementary material online, Movies 2 and 3). The patient had multiple sources of left-to-right shunts. Right heart catheterization revealed high pulmonary blood flow with an estimated Qp/Qs ratio of 2.2, without pulmonary hypertension. The patient was treated with diuretics and angiotensin-converting enzyme inhibitors, which led to symptom resolution and meeting the classification in NYHA functional class I. Additionally, the patient was regularly monitored for heart failure symptoms and the size of the coronary arteries by echocardiography.

Consent: The authors confirm that written informed consent for submission and publication of this case report including images and associated text has been obtained from the patient in line with COPE guidance.

Conflict of interest: None declared.