

An unusual angiographic finding in a patient with an established diagnosis of dilated cardiomyopathy

Nietypowy obraz angiograficzny u pacjenta z rozpoznaną kardiomiopatią rozstrzeniową

Jarosław D. Skowroński¹, Jerzy Pręgoski¹, Paweł Tyczyński¹, Łukasz Kalińczuk², Adam Witkowski¹

¹Department of Interventional Cardiology and Angiology, Institute of Cardiology, Warsaw, Poland

²Department of Coronary and Structural Heart Diseases, Institute of Cardiology, Warsaw, Poland

Childhood diseases are rare in adults, but their aftermath can have a crucial influence on the patient's life. One example is Kawasaki disease (annual incidence of 5 to 10 per 100,000 patients younger than five years of age in Europe), which is the most commonly acquired childhood heart disease in developed countries. We present a case of a female who developed heart failure (HF) symptoms in childhood but the imaging of coronary arteries was postponed till the age of 43 years. A 43-year-old patient diagnosed with dilated cardiomyopathy (DCM) and chronic HF at the age of 11 was admitted to our institution during qualification for an orthotopic heart transplantation (OHT). The patient had the following co-morbidities: ventricular tachyarrhythmias (VTs), amiodaron-induced hypothyroidism, and implanted cardiac resynchronisation therapy defibrillator (CRT-D). The patient had been clinically (New York Heart Association II) and echocardiography (left ventricular ejection fraction 15%, left ventricular end-diastolic diameter 64 mm, right ventricular systolic pressure 34 mmHg) stable for four years but was re-evaluated and stratified into the high risk of mortality category due to the recurrent arrhythmias (slow VTs in CRT-D control) and significant left ventricular dysfunction. Coronary angiography was performed (Figs. 1, 2) and revealed an unusual vascular malformation — tortuous artery vessels running through the occluded proximal segment of the left anterior descending artery (LAD). We hypothesise that the isolated proximal LAD abnormality is the sequel of a re-canalisation of the coronary artery occluded in the course of undiagnosed Kawasaki disease. This is supported by the presence of angiographically visible aneurysmatic calcified structure within proximal LAD, through which run the very well-developed collaterals. No other abnormalities were detected in the coronary arteries (Figs. 1, 3). Because pulmonary hypertension was excluded and following the disqualification from the coronary artery bypass grafting procedure, the patient was listed for OHT. The current angiography revealed an unusual finding. The examination was consulted with several experienced interventional cardiologists, who could not establish a firm diagnosis. Due to the history of early onset of HF in childhood and angiographic features and the long follow-up we hypothesise that the patient is a survivor of Kawasaki disease. The current case supports the role of imaging of coronary arteries in patients with symptoms of HF even in the absence of typical angina.



Figure 1. Angiography of left coronary artery with tortuous re-canalisation of left anterior descending

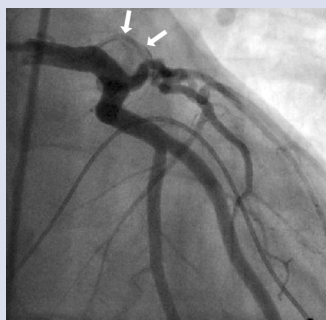


Figure 2. Angiography — aneurysm in the left anterior descending artery



Figure 3. Angiography of a normal right coronary artery

Address for correspondence:

Jarosław D. Skowroński, MD, Department of Interventional Cardiology and Angiology, Institute of Cardiology, ul. Alpejska 42, 04-628 Warszawa, Poland, e-mail: jskowronski@ikard.pl

Conflict of interest: none declared

Kardiologia Polska Copyright © Polskie Towarzystwo Kardiologiczne 2018