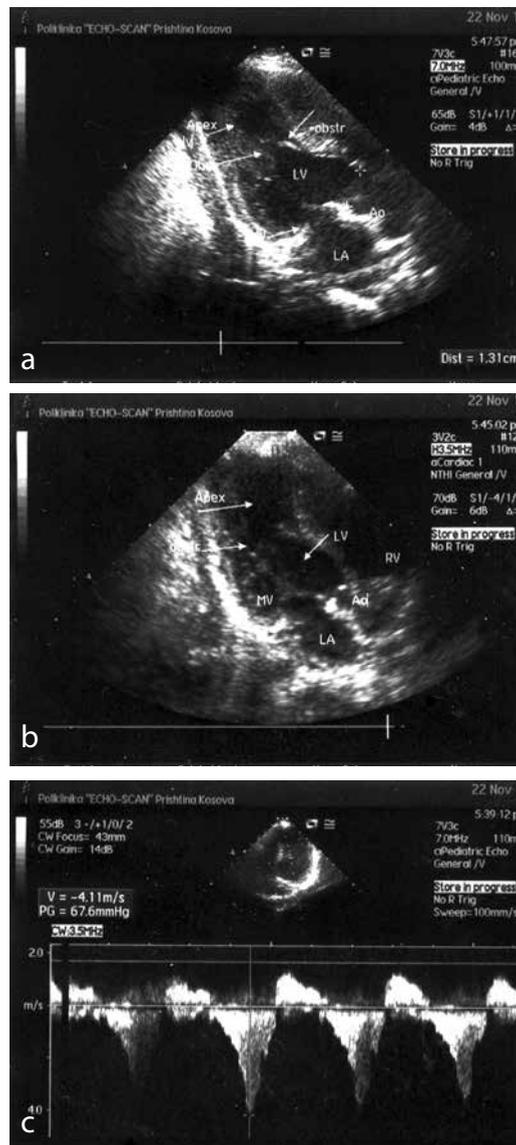


DOUBLE CHAMBER LEFT VENTRICLE ASSOCIATED WITH SEVERE FORM OF HYPERTROPHIC CARDIOMYOPATHY

Ramush BEJIQI¹, Ragip RETKOCERI¹, Hana BEJIQI²

¹Division of Cardiology, Pediatric Clinic
 University Clinical Center of Kosovo
 Prishtina, Republic of Kosovo
²Main Center of Family Medicine
 Prishtina, Republic of Kosovo

In a 28-month-old girl, from a normal pregnancy and absolutely healthy parents, weighing 16.3 kg, a systolic murmur was noted during a routine pediatric examination and she was referred for cardiological examination at tertiary level. The child's growth and development were completely normal. Her arterial blood gas level was within normal limits. The clinical examination demonstrated: a quiet precordium, normal first heart sound, short midsystolic murmur 2-3/6 degree on the apex and left sternal border, and a single second heart sound. The electrocardiogram showed: left axis deviation, and biventricular hypertrophy. A chest radiogram revealed an enlarged cardiac silhouette with a narrow mediastinum. Echocardiography demonstrated: normal systemic and pulmonary vein connections, with reduced interatrial communication. There were normal atrio-ventricular and ventriculo-arterial connections. From an apical four-chamber view, symmetric hypertrophy of the left ventricle was demonstrated during diastole, and a subaortic obstruction, together with interventricular septal hypertrophy and thickening. In addition, the echocardiographic examination revealed 2



Color version available online.

chambers divided by a muscular hypertrophic mass. The hypertrophy was symmetric and severe, causing the cavity of the left ventricle to be anatomically divided into two separate parts. The apical part was seen to be separated from the outlet and inlet portion, but was clearly presented and was actively taking part in left ventricle contractility (Panel A, Panel B). On continuous Doppler waves minor mitral regurgitation was noted. A systolic gradient between the two left chambers was measured with maximum velocity of 4.1 m/s and a gradient of 67 mm of mercury (Panel C). Color Doppler showed a narrow and turbulent color area in systole on the middle part of the left ventricle, running to the mitral valve. This raised doubts that this was more likely a case of double chamber left ventricle associated with HCM than a case with diverticulum or aneurysm of the left ventricle.

Key words: Double chamber left ventricle ▪ Family screening ▪ Hypertrophic cardiomyopathy ▪ Echocardiography.

Authors' contributions: Conception and design: RB, RR; Acquisition, analysis and interpretation of data: HB, NZ; Drafting the manuscript: RB, RR; Revising it critically for important intellectual content: MB, AM.

Conflict of interest: The authors declare that they have no conflict of interest.

Corresponding author:

Ramush Bejqi
Division of Cardiology
Pediatric Clinic
University Clinical Center of Kosovo
Prishtina, Republic of Kosovo

rbejqi@hotmail.com

Tel.: + 377 44 120 129; Fax.: + 381 38 553 217

Received: January 21, 2013; **Accepted:** April 2, 2013

Copyright © 2013 by University Clinical Center
Tuzla. E-mail for permission to publish:
paediatricstoday@ukctuzla.ba