

Clinical Image

Three Separate Coronary Arteries with Hypertrophic Cardiomyopathy

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Abstract

Coronary arteries anomalies are an uncommon congenital heart disease. Anomalous origin of three separate ostia is the rarest condition. Hypertrophic cardiomyopathy is the most common inherited disease. There have been just few cases of hypertrophic cardiomyopathy in relation with congenital coronary anomaly. In this report, we describe a rare case of anomalous origin of all three coronary arteries from separate ostia with apical hypertrophic cardiomyopathy.

Key words: Coronary anomaly, Coronary angiography, Hypertrophic cardiomyopathy.

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A 48-year-old man was referred to our hospital for evaluation of chest pain on exertion. On physical examination was normal. Chest X-ray revealed no

cardiomegaly and electrocardiogram showed left ventricular hypertrophy with strain pattern (Fig 1). Transthoracic echocardiogram showed apical left

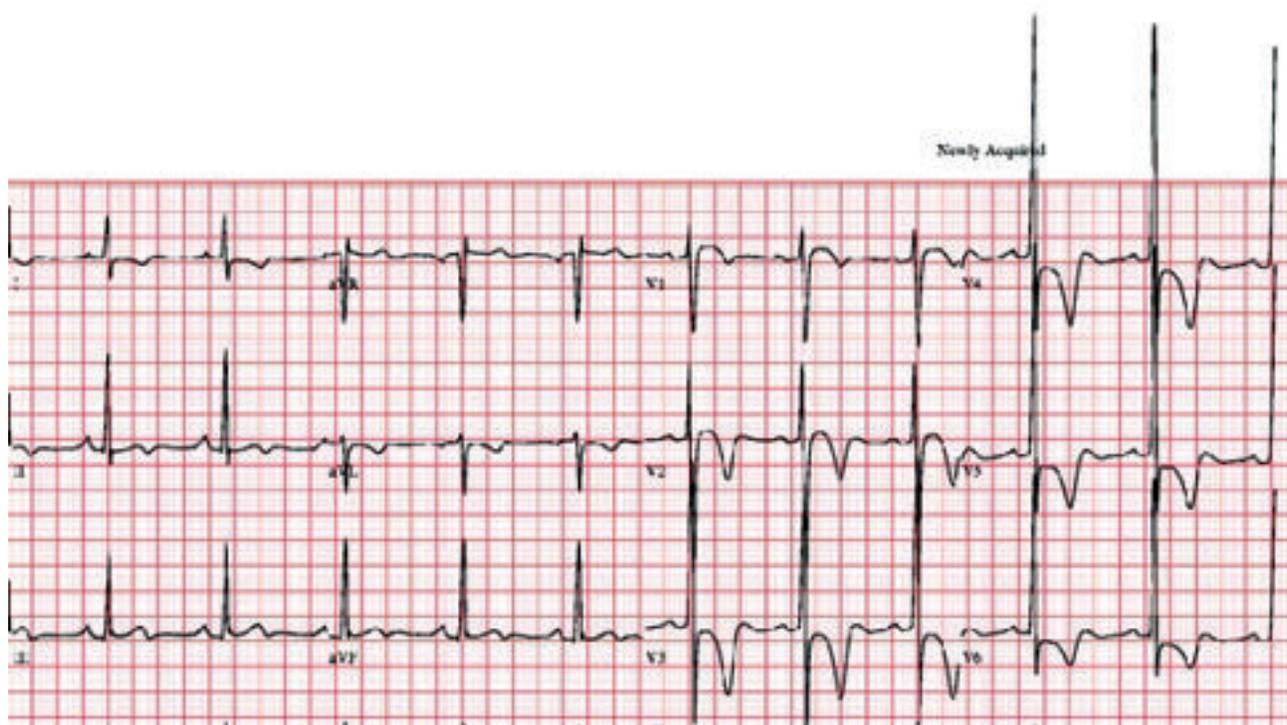


Fig 1: LVH with strain.

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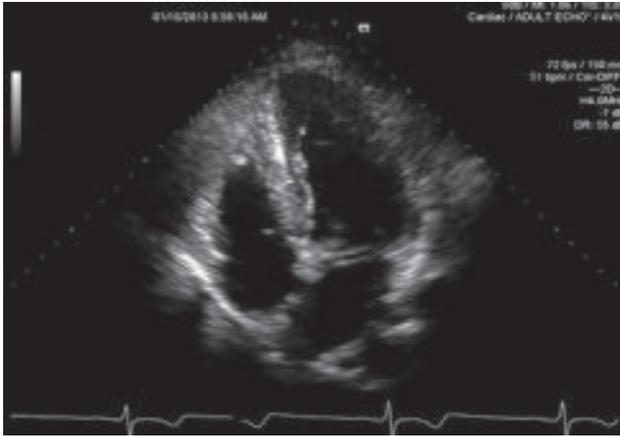


Fig 2: Apical left ventricular hypertrophy with normal left ventricular function.

ventricular hypertrophy with normal left ventricular function on apical4 chamber view (Fig 2). Coronary angiography demonstrated non-stenotic lesion in coronary arteries and myocardial bridge in septal branch. Right coronary artery and left anterior descending artery arose from their normal origin (Fig 3). Left circumflex artery appeared to arise from separate ostium within right coronary sinus and followed a retro-aortic course (Fig 4). Coronary artery anomalies are a rare cardiac disease. There have been few reports of anomalous origin of coronary arteries in association with hypertrophic cardiomyopathy.^{1,2}

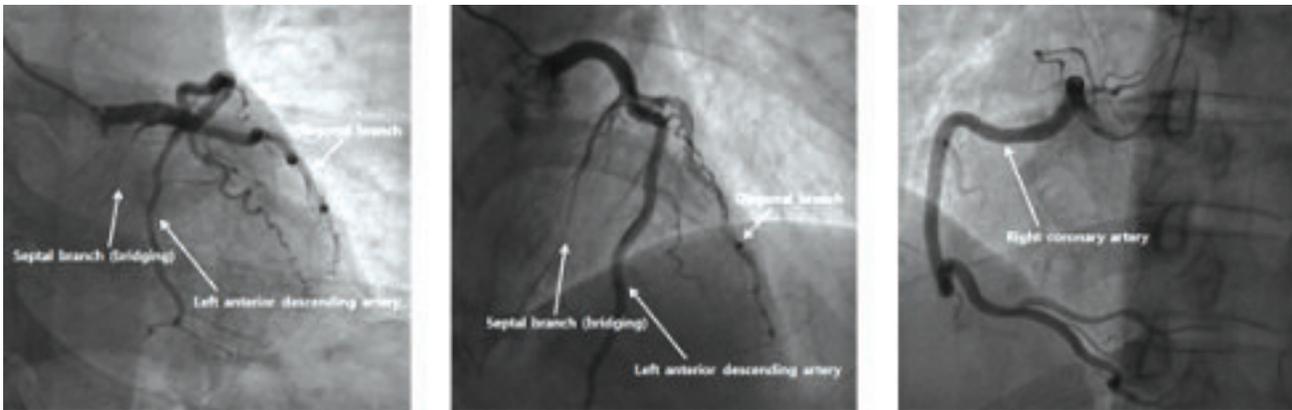


Fig 3: RCA & LAD with their normal origin.

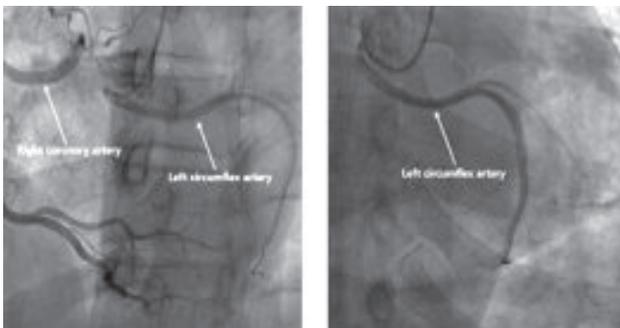


Fig 4: Left circumflex artery with retro-aortic course

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