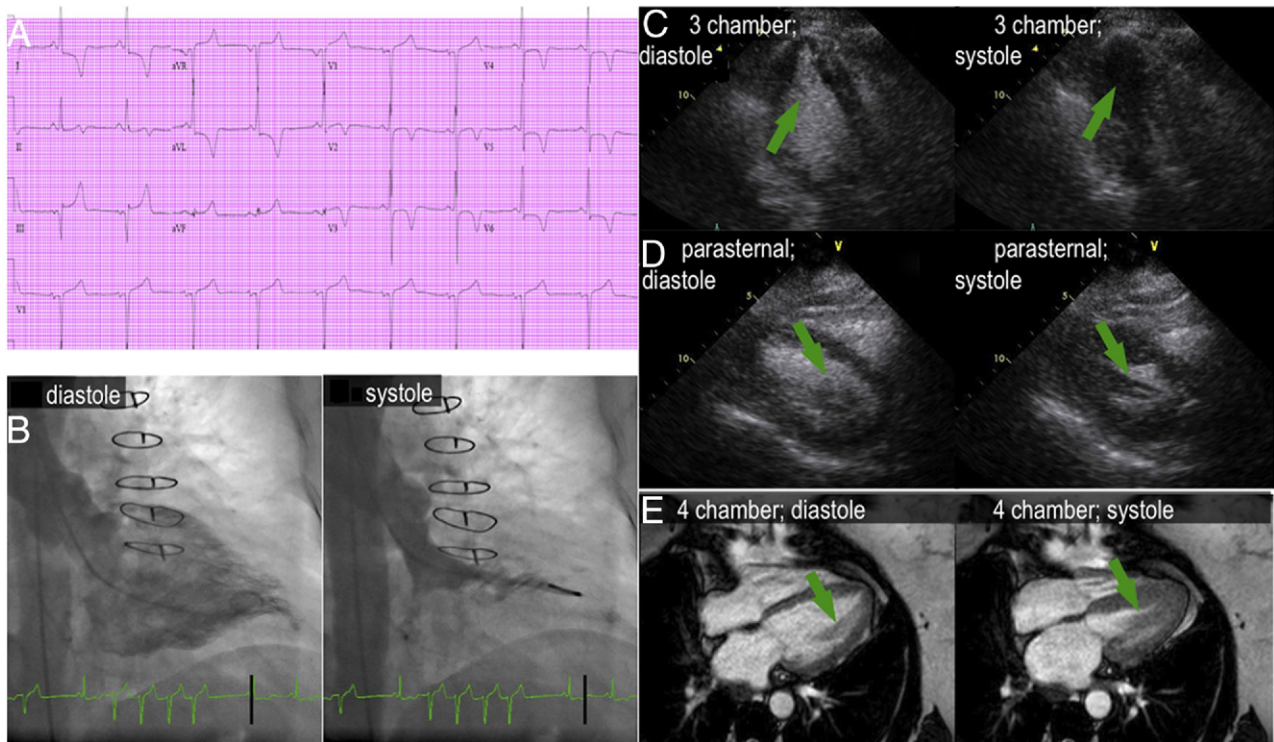


IMAGES IN CARDIOLOGY

Hypertrophied Papillary Muscles as a Masquerade of Apical Hypertrophic Cardiomyopathy

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A 63-year-old woman with coronary artery bypass grafting 3 years ago presented with continued fatigue and mild chest tightness since her surgery. Her resting electrocardiogram showed widespread deep T-wave inversions. (A) Coronary angiography revealed occluded grafts to the diagonal and circumflex arteries. Incidentally, left ventriculogram revealed the spade-like configuration of mid-apical cavity obliteration suggestive of apical hypertrophic cardiomyopathy (B) (Online Video 1).

Contrast echocardiography (C, D) (Online Videos 2 and 3) and cardiac magnetic resonance imaging (E) (Online Video 4) showed normal ventricular wall thickness. The mid-apical cavity systolic obliteration is due to hypertrophied and apically displaced papillary muscles (green arrows) rather than true apical hypertrophy. The patient was reassured that she did not have apical hypertrophic cardiomyopathy, and her anti-anginals were up-titrated.

This case highlighted the superiority of cardiac magnetic resonance and contrast echocardiography in visualizing the left ventricular apex and that the differential diagnosis for apical hypertrophic cardiomyopathy should include unusual hypertrophied papillary muscles.