

An unusual cause of electrocardiographic abnormality: solitary papillary muscle hypertrophy

Elektrokardiyografik bozukluğun nadir bir nedeni: Soliter papiller kas hipertrofisi

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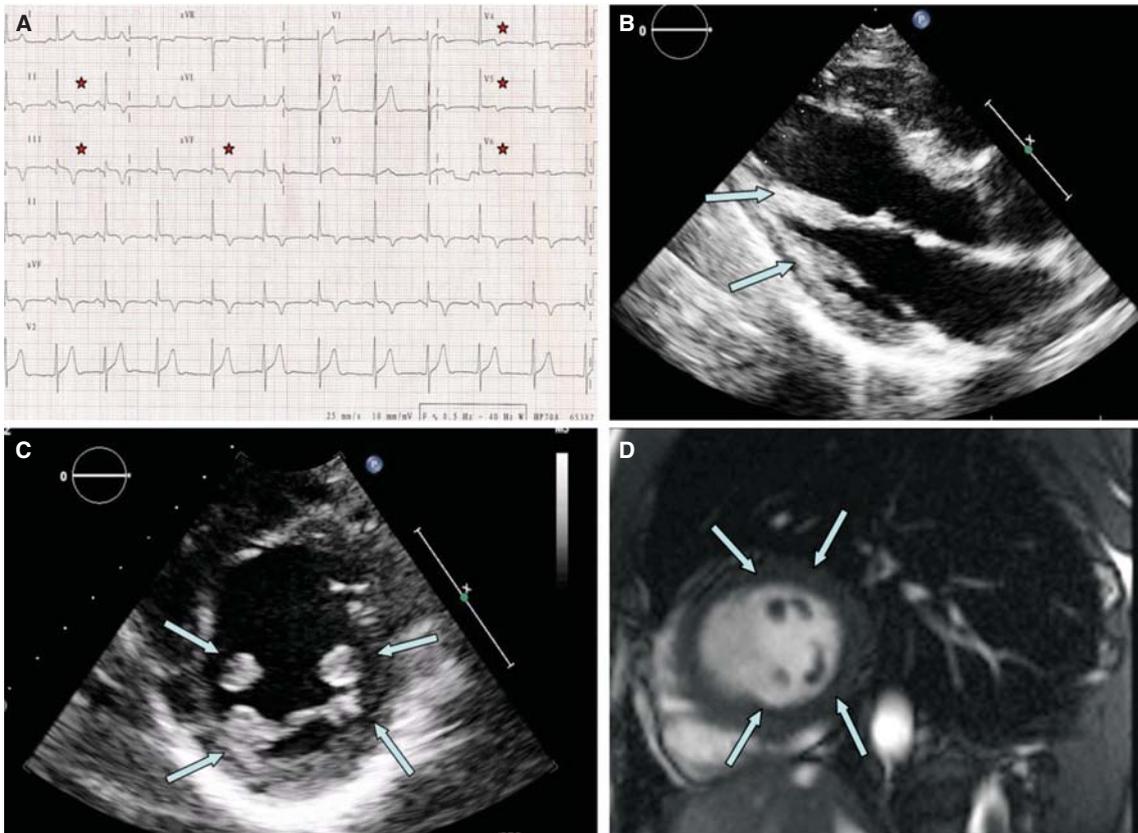
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A 21-year-old male with atypical chest pain was referred to our emergency department. The clinical examination was unremarkable. Electrocardiography showed a 1- to 2-mm ST-segment elevation and deep inversion of the T-wave segment in the inferior leads, and a slight T wave inversion in leads V4-V6 (Fig. A). Cardiac enzymes were found in the blood at low levels. There

was no evidence of ventricular dysfunction, and left ventricular regional wall motion abnormalities on two-dimensional echocardiography examination. The papillary muscles were hypertrophic in the parasternal long-axis and parasternal short-axis view (Figs. B, C). Coronary angiography and myocardial perfusion scintigraphy results were normal. A cardiac MRI was performed to confirm the diagnosis and exclude other etiologies. Cardiac magnetic resonance imaging (MRI) demonstrated marked thickening of the papillary muscles, confirming papillary muscle hypertrophy (Fig. D). A specific treatment was not required in our patient who was informed about his cardiac abnormality.



Figures– (A) Electrocardiography shows a 1-2 mm ST-segment elevation and deep inversion of T-wave segment in the inferior leads V4-V6. (B) Parasternal long axis of two-dimensional echocardiography shows hypertrophic papillary muscles. (C) Parasternal short axis of two-dimensional echocardiography shows hypertrophic papillary muscles. (D) Cardiac magnetic resonance imaging shows marked thickening of the papillary muscles.