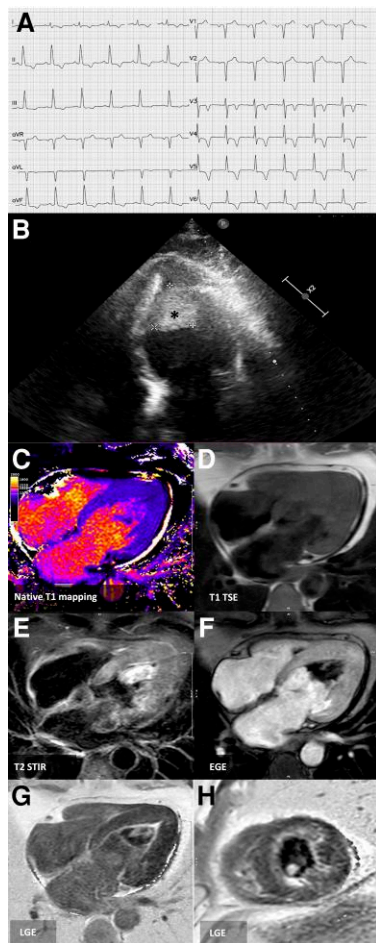


Dual apical hypertrophic cardiomyopathy and endomyocardial fibrosis pathology

Chiara Martini¹, Davide Scordo¹, Lorenzo Molinari¹, Sabina Gallina¹, and Fabrizio Ricci ^{1,2,3*}

¹Department of Neuroscience, Imaging and Clinical Sciences, G.d'Annunzio University of Chieti-Pescara, Via Luigi Polacchi, 11, 66100 Chieti, Italy; ²Department of Clinical Sciences, Lund University, Jan Waldenströms gata 35, 214 28 Malmö, Sweden; and ³Fondazione Villaserena per la Ricerca, 65103 Città Sant'Angelo, Italy

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A 66-year-old man was referred to our cardiology unit with worsening shortness of breath on exertion. Electrocardiogram (ECG) showed sinus rhythm, QS complex in leads V1 and V2, and diffuse negative symmetric T-waves (panel A). Echocardiography revealed thickened apical segments with obliteration of the left ventricular cavity and a mobile intraventricular isoechoic mass of 40 × 35 mm (panel B, asterisk). Low-molecular-weight-heparin and warfarin were immediately started. Blood tests documented absolute eosinophil count of 4500/μL. After a thorough workup ruled out causes for secondary eosinophilia, a diagnosis of hypereosinophilic syndrome was suspected. Cardiovascular magnetic resonance imaging documented the presence of relative apical hypertrophy with abnormal basoapical tapering of left ventricular wall thickness, papillary muscle apical displacement, and elongated anterior mitral valve leaflet and revealed major diagnostic criteria of endomyocardial fibrosis with a layer of subendocardial late gadolinium enhancement lining the apical segments of both ventricles with superimposed intracavitary thrombosis (panels C to H, [Supplementary material online, Videos S1 and S2](#)). Endomyocardial biopsy obtained from the right ventricular septum confirmed the fibrous thickening of the endocardium and presence of faecal areas of myofibrillar disarray and replacement fibrosis. The patient was discharged on warfarin but declined steroid treatment and genetic testing. Six-month follow-up was uneventful with partial resolution of left ventricular thrombosis. We present a case of dual apical hypertrophic cardiomyopathy and endomyocardial fibrosis pathology in a patient with idiopathic hypereosinophilic syndrome, a rare disorder with frequent cardiac involvement featuring endocardial fibrous tissue proliferation. Treatment is mainly directed towards prevention and management of chronic heart failure, arrhythmia, pulmonary hypertension, and thromboembolic events.

Supplementary material

[Supplementary material](#) is available at *European Heart Journal – Case Reports* online.

Consent: The patient has given his consent for the use of his medical data and images.

* Corresponding author. Tel: (+39) 0871-355 6922, Email: fabrizio.ricci@unich.it

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Data availability

No new data were generated or analysed in support of this research.