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IMAGES IN CARDIOLOGY

Cardiac Imaging in FIP1L1-PDGFRA

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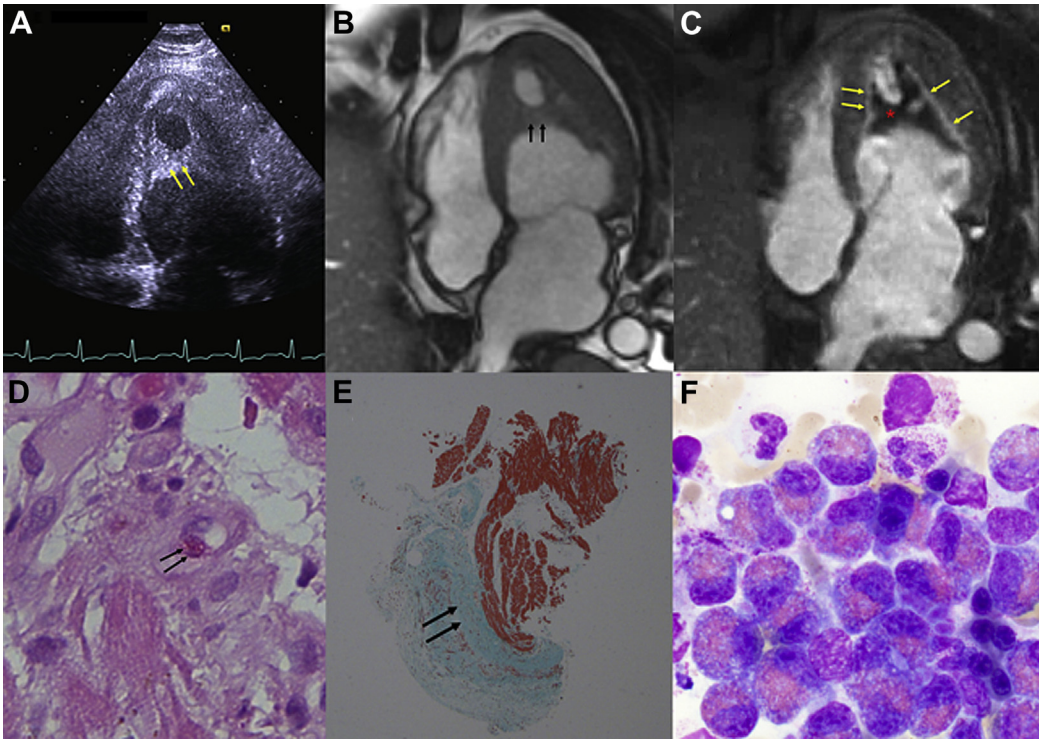

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FIP1L1-PDGFRA is a recently discovered rare cause of primary hypereosinophilia, classified as myeloid and lymphoid neoplasm (1). One-third of patients may have cardiac involvement manifesting as heart failure or left ventricular thrombus (1), commonly leading to a misdiagnosis of apical hypertrophic cardiomyopathy.

A 50-year-old man presented with acute pulmonary edema and eosinophilia. Transthoracic echocardiographic results were suspicious for apical hypertrophic cardiomyopathy **(A, arrows)**. Cardiac magnetic resonance imaging demonstrated a homogenous mass **(arrows)** within the left ventricle (**B**, Online Video 1). Late gadolinium enhancement imaging demonstrated a non-enhancing left ventricular mass, consistent with extensive thrombus **(C**, **red asterisk)**. There was thin subendocardial late gadolinium enhancement **(arrows)**, subtending the thrombus distribution, pathognomonic for subendocardial fibrosis. Endomyocardial biopsy showed eosinophils **(D, arrows)** and endocardial fibrosis **(E, arrows)**. Bone marrow aspirate demonstrated marked eosinophilia **(F)**, confirming FIP1L1-PDGFRA.

REFERENCE

1. Pardanani A, D'Souza A, Knudson RA, Hanson CA, Ketterling RP, Tefferi A. Long-term follow-up of FIP1L1-PDGFRA-mutated patients with eosinophilia: survival and clinical outcome. Leukemia 2012;26:2439–41.