CARDIOVASCULAR FLASHLIGHTS

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Inflammatory cardiomyopathy: searching an infrequent cause

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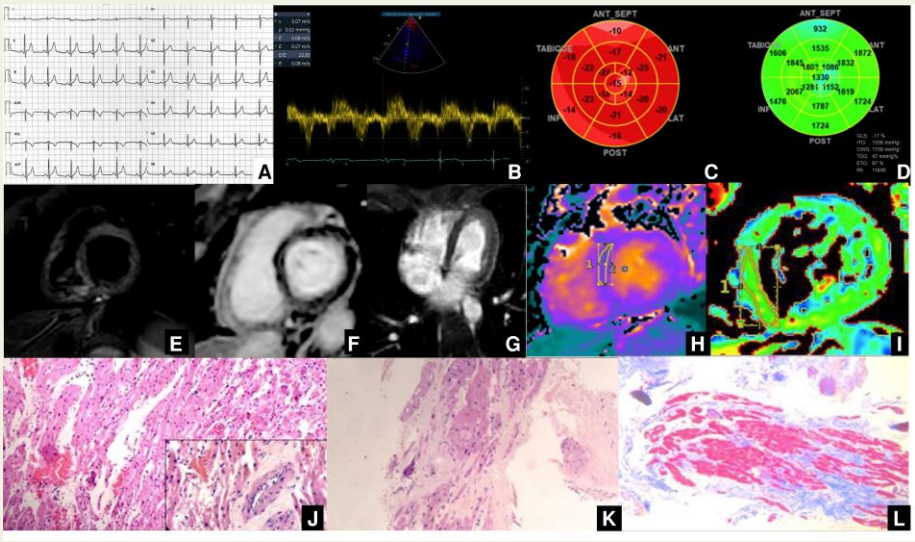
A 42-year-old male with a history of dyslipidaemia underwent evaluation due to a 6-month history of chest pain, palpitations, dyspnoea, and dysphagia. An electrocardiogram (*Panel A*) ruled out ischaemia. Ultra-sensitive troponin I was within normal limits, but creatine phosphokinase-MB, C-reactive protein, and creatinine levels were elevated (35.4 U/L, 18.03 mg/L, and 1.35 mg/dL, respectively).



Echocardiogram findings revealed diastolic dysfunction (*Panel B*), a left ventricular ejection fraction of 51% without kinetic alteration, left ventricular global longitudinal strain of 17%, and global constructive work of 1758 mmHg% (*Panels C* and *D*). Cardiovascular magnetic resonance (Supplementary data online, Video 1) with basal and mid-ventricular short-axis T2W demonstrated segmental and subepicardial elevation (*Panel E*). Mid-wall late gadolinium enhancement in the interventricular septum and lateral wall (*Panels F* and *G*) global native myocardial T1 and T2 mapping showing increased values of 1102 and 65 ms, respectively (*Panels H* and *I*). Extracellular volume was elevated (32%). Angiography showed non-obstructive coronary arteries (Supplementary data online, Videos 2 and 3. Left ventricular endomyocardial biopsy (Supplementary data online, Video 4) revealed CD3-positive T-lymphocytes, myocardial wall thickening secondary to fibrosis (Masson's Trichrome and Elastic Fibres), suggestive of chronic inflammation (*Panels J–L*). In a multidisciplinary approach, Anti Jo-1 antibody was positive, suggested anti-synthetase syndrome (ASS). High-dose prednisone and mycophenolate mofetil therapy resulted in symptom improvement and resolution of inflammatory cardiomyopathy.

Anti-synthetase syndrome clinical features encompass interstitial lung disease, myositis,[1] arthritis, Raynaud phenomenon, fever, mechanic's hands, and skin rashes.[2] Myocarditis is rarely diagnosed due to its subclinical presentation, with male patients being more frequently affected.[3,4] It is crucial to be vigilant in recognizing uncommon manifestations of ASS in the absence of clinical myositis like this case.[5]

Supplementary data are available at *European Heart Journal* online.

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No data were generated or analysed for this manuscript.

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