Circumferential Strain in the Diagnosis of Acute Myocarditis

Antonio Carvalho Leme Neto, Gustavo Carvalho

Mediclin Centro Médico e Diagnóstico por Imagem; Hospital Santa Cruz, Curitiba, Paraná – Brazil

The diagnosis of myocarditis with preserved ventricular function is challenging and empirically based on clinical presentation, ECG abnormalities, elevation of myocardial necrosis markers and absence of coronary artery disease.

Focal myocarditis may mimic acute ischemic syndromes. Cardiac catheterization is often performed.

Magnetic resonance imaging is the noninvasive methodology used for the diagnosis of myocarditis, but with a high cost and not widely available.

In this imaging manuscript, we diagnose a case of acute myocarditis with normal ventricular function through circumferential strain.

Keywords

Myocarditis; Myocardium/necrosis; Diagnostic Imaging; Magnetic Resonance Imaging.

Mailing Addres: Antonio Carvalho Leme Neto •
Rua Dionira Moletta Klemtz, 201, Casa 122. Postal Code 81320-390, Fazendinha, Curitiba, Paraná - Brazil
E-mail: carvalho.leme.neto@gmail.com
Manuscript received April 1, 2017; revised April 12, 2017; accepted April 12, 2017

DOI: 10.5935/2318-8219.20170023

Authors' contributions

Research creation and design: Leme Neto AC; Data acquisition: Leme Neto AC; Data analysis and interpretation: Leme Neto AC; Statistical analysis: Leme Neto AC; Manuscript drafting: Leme Neto AC; Critical revision of the manuscript as for important intellectual content: Leme Neto AC, Carvalho G.

Potential Conflicts of Interest

There are no relevant conflicts of interest.

Sources of Funding

This study had no external funding sources.

Academic Association

This study is not associated with any graduate program.

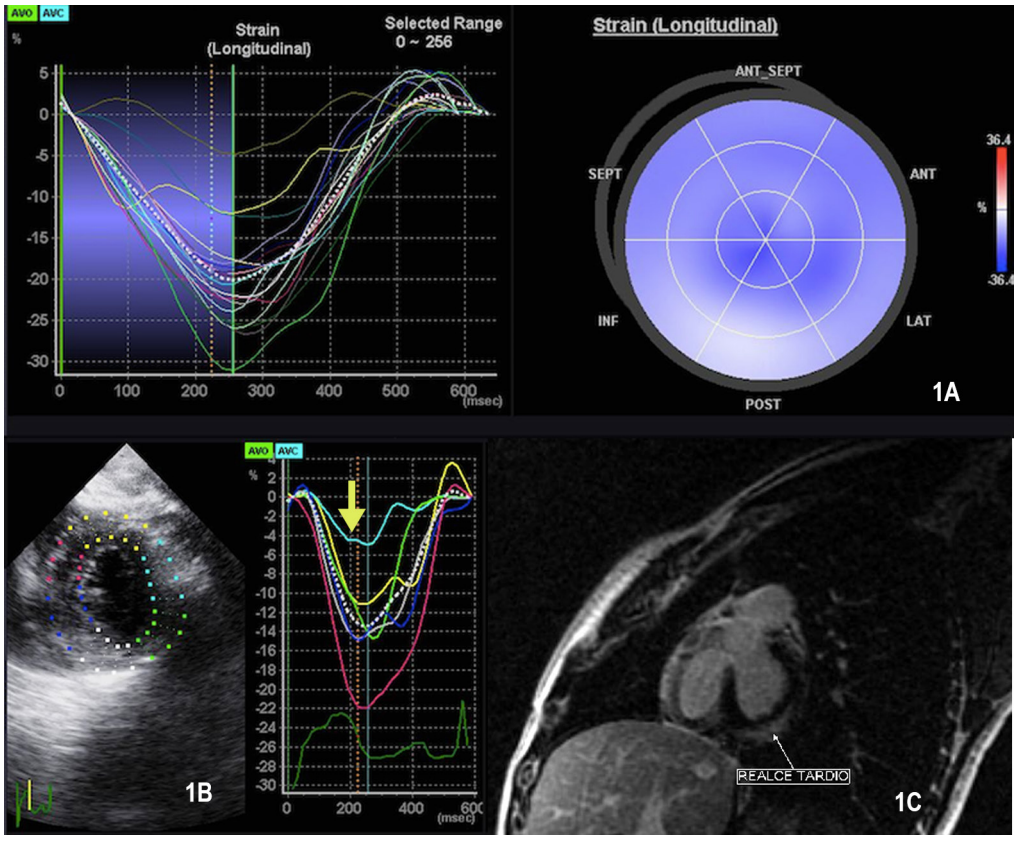

Figure 1 – *A: Evidence of normal ejection fraction with preserved global longitudinal strain; B: Obvious reduction of circumferential strain in the left ventricular basal inferolateral segment (arrow-light blue line); C: Basal inferolateral late enhancement on nuclear magnetic resonance imaging (confirming the myocarditis process at this level).*