International Journal of
Clinical & Medical Images

ISSN : 2376-0249
Vol 9 • Iss 11 • 1000860, 2022

Clinical-Medical Image

Subclinical Alterations in Myocardial Structure

Alves Ayadi*
Department of Cardiology, University of Calgary, Canada, USA

Clinical-Medical Image

Early on in the natural course of the disease, subclinical changes in the structure and function of the myocardium occur. On the other hand, clinically obvious signs and symptoms appear in the later stages and are linked to worse outcomes. It is essential to identify such subclinical changes for prompt diagnosis and precise treatment. As a result, using imaging methods that are both accurate and repeatable at a low cost may improve long-term prognoses. Quantifying deformation parameters with cardiac magnetic resonance (CMR) is supported by a growing body of evidence. Recent studies have focused on the diagnostic and prognostic roles that tissue-tagging CMR (TT-CMR) and feature-tracking CMR (FT-CMR) can play in ischemic heart disease and primary myocardial illnesses. These techniques can measure longitudinal, circumferential, and radial strains. Additionally, these techniques are capable of accurately determining LV wringing and functional dynamic geometry parameters like LV torsion, twist/untwist, LV sphericity index, and long-axis strain. Numerous studies have demonstrated their usefulness in prognostic prediction for a variety of cardiovascular patients. Although a small number of recent but significant studies have suggested that fast strain-encoded imaging CMR-derived myocardial strain is superior in terms of accuracy and significantly reduced acquisition time, additional research is required to determine its clinical impact. The purpose of this review is to provide an overview of the data that are currently available regarding the role of CMR in assessing biomechanics and strain in the myocardium [1,2].

Keywords: Cardiac magnetic resonance imaging; Left ventricle torsion; Myocardium

References

[1] Kuschyk J, Naegele H, Heinz-Kuck K, Butter C, Lawo T. (2019) Cardiac contractility modulation treatment in patients with symptomatic heart failure despite optimal medical therapy and cardiac resynchronization therapy (CRT). *Int J Cardiology*, 277: 173-177.

[2] Tint D, Florea R, Micu S. (2019) New generation cardiac contractility modulation device filling the gap in heart failure treatment. *J Clin Med*, 8: 588.

Received: *03 November 2022, Manuscript No. ijcmi-23-89016;* ***Editor assigned:*** *05 November 2022, Pre QC No. P-89016;* ***Reviewed:*** *18 November 2022, QC No. Q-89016;* ***Revised:*** *21 November 2022, Manuscript No. R-89016;* ***Published:*** *28 November 2022, DOI: 10.4172/2376-0249.1000860*

****Corresponding author:*** *Alves Ayadi, Department of Cardiology, University of Calgary, Canada, USA, Tel: +9136578629; E-mail: ayadialves39@gmail.com*

Citation: *Ayadi A. (2022) Subclinical Alterations in Myocardial Structure. Int J Clin Med Imaging 9:860.*