

MCE for viability & determining potential benefit from CRT

Clinical Case Portal

Date of publication:

01 Dec 2011

Topics: Echocardiography (Non-invasive imaging)
Non-invasive imaging: Echocardiography, MR/CT, Nuclear

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Abstract

Case from the [Contrast Echo Box](#)
[Detection of Viability](#)

Introduction

There is increasing evidence now to suggest that individuals are less likely to respond to cardiac resynchronization therapy (CRT) if the LV lead is placed over an area of underlying scar tissue. As the posterolateral cardiac vein is frequently used, ensuring viability of these walls is of paramount importance.

Case Report

- Fig 1 - Apical 4-ch view showing severe LV impairment – patient being evaluated for CRT
- Fig 2 - Perfusion analysis reveals absent uptake of contrast after flash destruction in the lateral wall, implying this area is non-viable and so an LV lead should not be placed over this area of myocardium
- Fig 3 - The lateral wall in this example is viable, as contrast uptake is seen after flash destruction (implying an intact microcirculation)
- Fig 4 - The patient went on to have CRT device implanted and follow-up echo showed reduced LV volume (reverse remodelling) with improved ejection fraction

Conclusion

This case helps to demonstrate the utility of MCE-derived viability assessment for determining optimal LV lead positioning.

Video 1 :
[CRT possibility](#)



Video 2 :
[CRT non viable](#)



Video 3 :
[CRT viable](#)



Video 4 :
[Post CRT](#)

