

Inducible ischaemia in the LAD by vasodilator MCE

Clinical Case Portal

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Non-invasive imaging: Echocardiography, MR/CT, Nuclear

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Abstract

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

Introduction

- 80yr old patient with effort dyspnea, no chest pain
- Hypertensive, type II diabetes
- Normal resting ECG
- Normal resting echocardiogram

Referred for stress echocardiography

Case Report

MCE - REST images

Flash imaging at rest, normal replenishment within 5 cardiac cycles (fig 1). See fig 2-5 for still images of this movie.

MCE - STRESS images

Flash imaging after dipyridamole stress (fig 6). Note the clear subendocardial perfusion defect - see fig 7-10 for the still images from this movie.

Video 1 :
[Normal Rest MCE](#)

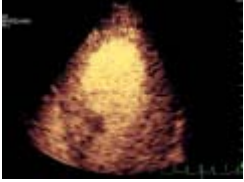


Fig. 1 :
[A: Pre-flash Normal perfusion in all walls](#)

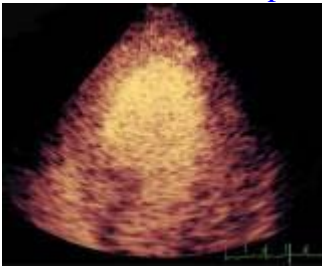


Fig. 2 :
[B: Flash impulses to destroy contrast in myocardium](#)

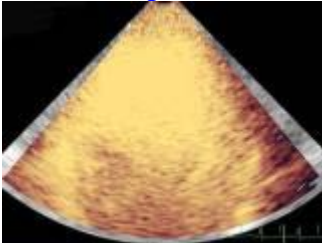
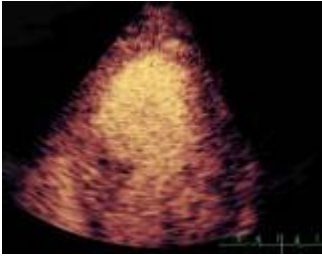


Fig. 3 :
[C: Post flash myocardium is black due to bubble destruction](#)



Fig. 4 :

D: Normal replenishment within 5 beats



Video 2 :
Abnormal Stress MCE



Fig. 5 :
A: Pre-flash normal perfusion in all walls

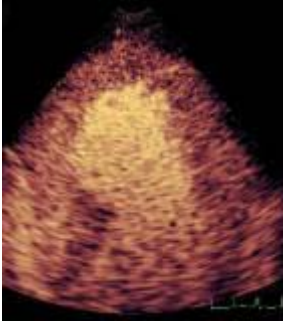


Fig. 6 :
B: High MI flash frames

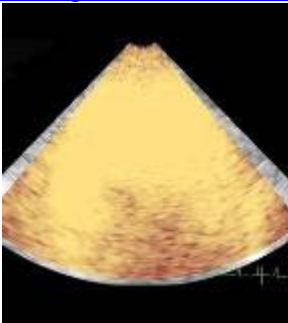


Fig. 7 :

C: Post-flash frame confirming good bubble destruction



Fig. 8 :

D: Extensive perfusion defect (delayed refilling) extending from mid-apical septum through entire lateral wall

