

Image in cardiology

Comprehensive Assessment of Myocardial Fibroma by Cardiovascular Magnetic Resonance Imaging

Evaluación detallada de un fibroma miocárdico mediante resonancia magnética cardiovascular

Andreas Schuster* and Eike Nagel

Division of Imaging Sciences and Biomedical Engineering, King's College London British Heart Foundation Centre of Excellence, National Institute of Health Research Biomedical Research Centre at Guy's and St. Thomas' NHS Foundation Trust, Wellcome Trust and Engineering and Physical Sciences Research Council Medical Engineering Centre, The Rayne Institute, St. Thomas' Hospital, London, United Kingdom

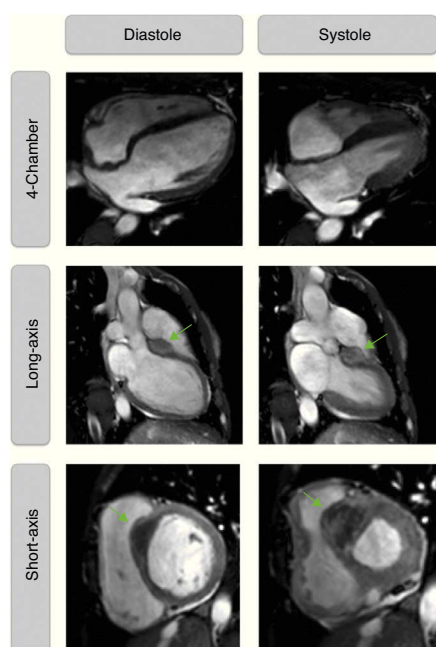


Figure 1.

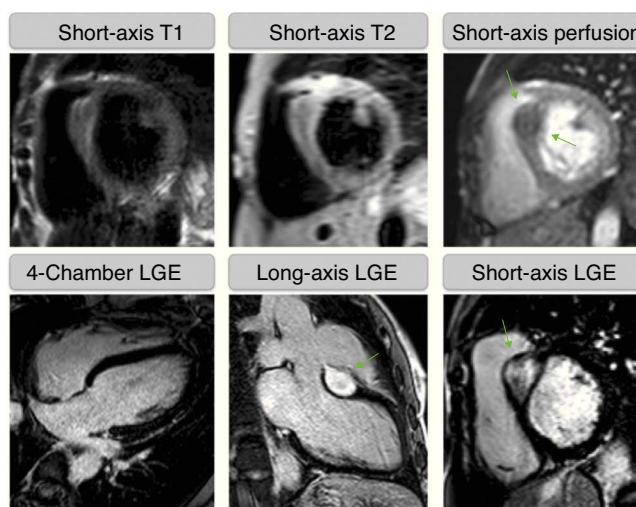


Figure 2.

A 33-year-old male was repeatedly admitted to the hospital and treated for sickle cell crises. During one of his admissions echocardiography was performed to assess cardiac function. Incidentally he was shown to have cardiac septal hypertrophy and was subsequently referred for an outpatient cardiac magnetic resonance investigation.

The images showed normal systolic function of the moderately dilated left ventricle, with left ventricular ejection fraction of 66% and end diastolic volume of 149 mL/m². There was an intramyocardial mass located in the basal anterior septum (segment 2, maximal diameter 20 mm), clearly delineated from the surrounding myocardium (Fig. 1). The mass showed intermediate signal on T2 weighted images and on T1 weighted black blood images without fat suppression. Perfusion imaging showed a defect in the area of the mass at rest (Fig. 2, arrows upper right panel). There was high signal in that area on late gadolinium-enhanced (LGE) images. Diagnosis of benign cardiac fibroma was made. Benign cardiac tumors are usually clearly delineated from the surrounding myocardium, which is the most important distinction from malignant cardiac tumors. This case highlights the diagnostic abilities of cardiac magnetic resonance with adequate tissue characterization using T1 weighted images, T2 weighted images, first pass perfusion and late gadolinium-enhanced images.

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* Corresponding author:

E-mail address: andreas_schuster@gmx.net (A. Schuster).

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