

POSTER PRESENTATION

Open Access

Cardiac MRI findings in patients with Myocarditis

Darach O h-Ici*, Yves Louvard, Thierry Untersee, Thomas Hovasse, Marie Claude Morice, Jérôme Garot

From 2011 SCMR/Euro CMR Joint Scientific Sessions
Nice, France. 3-6 February 2011

Background

Cardiac Magnetic Resonance Imaging (CMR) is a . The recent conjoint report of the American College of Cardiology and the SCMR has classified its use as “appropriate” or “Class A Indication” in inflammatory cardiomyopathy. The aim of this study was to describe the typical findings in patients diagnosed with myocarditis undergoing CMR.

Methods

Patients who underwent CMR at ICPS who were diagnosed with myocarditis on the basis of cardiac imaging and clinical findings (patients, n = 187) between November 2009 and September 2010 were identified through the use of the cardiology database. All patients underwent a similar protocol to look for:

1. LV and RV function
2. The presence of pleural effusion
2. Tissue edema, as seen by an elevated T2 signal
3. Myocardial necrosis or scarring, as indicated by the presence of late gadolinium enhancement (LGE)

Results

Most patients (n=175, 93.6%) had LGE in a pattern sparing the subendocardium. Areas of hypokinesis were common (n = 62, 33.2%), as was the presence of myocardial edema (n = 58, 31.0%). Pericardial effusions were less common (n = 35, 18.7%). Of those patients who also underwent stress perfusion CMR, none showed evidence of ischemia. Left Ventricular ejection fractions were largely preserved ($57.3\% \pm 10.4\%$) and end-diastolic volumes normal ($69.2 \pm 21.4 \text{ ml/m}^2$).

Conclusion

CMR abnormalities are common in patients with myocarditis. A typical pattern of delayed enhancement is by

far the commonest abnormal finding in this group of patients. The use of a combination of CMR findings in keeping with the clinical picture is necessary for accurate diagnosis.

Published: 2 February 2011

doi:10.1186/1532-429X-13-S1-P323

Cite this article as: h-Ici et al.: Cardiac MRI findings in patients with Myocarditis. *Journal of Cardiovascular Magnetic Resonance* 2011 **13**(Suppl 1):P323.

**Submit your next manuscript to BioMed Central
and take full advantage of:**

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at
www.biomedcentral.com/submit

