

MRI, is easily accessible, cost-effective and convenient for patients. There were some limitations to the study. The study population was small due to the high cost of MRI examinations and the three examinations the patients had to undergo, namely the stress <sup>99m</sup>Tc-MIBI, the rest <sup>99m</sup>Tc-MIBI to indicate if myocardial infarction was present, and a myocardial MRI. The discrepancy between MRI and SPECT could possibly be as a result of the region of interest (ROI) drawn being dependent on the operator's skill and knowledge of MRI and <sup>99m</sup>Tc-MIBI imaging modalities.

**Conclusion**

As CAD remains one of the leading causes of death in the Western world indicating the need for good quality, reliable noninvasive myocardial imaging modality. Since scar tissue (infarction) in the myocardium is unlikely to benefit from revascularization, it is important to determine the extent and size thereof. Due to the characteristics of the MRI and rest <sup>99m</sup>Tc-MIBI SPECT it was decided to compare their global infarction size percentages in the search for the ultimate myocardial imaging modality. The MRI and rest <sup>99m</sup>Tc-MIBI SPECT global infarction size percentages showed a good correlation with only a 2% differentiation between their global infarction size percentages. Therefore, both the MRI and the MIBI scintigraphic imaging modalities infarction size percentages correlate in such a way that it may be used for myocardial viability diagnosis.

**References**

1. Bogaert, J. (ed.), Duerinckx, A.J. (ed.) & Rademakers, F.E. (ed.). 2000. *Magnetic Resonance of the Heart and Great Vessels*. Berlin, Germany: Springer. 123-137.
2. Eisner, R.L. & Patterson, R.E. 1999. The challenge of quantifying defect size and severity: Reality versus algorithm. *Journal Nuclear Cardiology*, 6(3): 362-371.
3. Gerber, B.L., Garot, J., Bluemke, D.A., Wu, K.C. & Lima, J.A.C. 2002. *Accuracy of Contrast-Enhanced Magnetic Resonance Imaging in Predicting Improvement of Regional Myocardial Function in Patients After Acute Myocardial Infarction*. Accessed 27 November 2002. <http://circ.ahajournals.org/cgi/content/full/106/9/103>

4. Shan, K., Constantine, G., Sivananthan, M.D. & Flamm, S.D. 2004. Role of Cardiac Magnetic Resonance Imaging in Assessment of Myocardial Viability. *Circulation*, 109: 1328-1334.
5. Marcelo( F.D.C. 2003. The quest for myocardial viability: Is there a role for nitrate-enhanced imaging? *Journal Nuclear Cardiology*, 10(6): 696-699.
6. Matsunari, M.D., Taki, J. & Tonami, N. 2002. Sequential Strategy Using Multimodality viability Test: Does It Work? Accessed 23 July 2004. <http://jnm.snmjournals.org/cgi/content/full/43/6/803>
- Oshinski, J.N., Han, H.C., Ku, D.N. & Pettigrew, R.I. 2001. Quantitative Prediction of Improvement in Cardiac Function after Revascularization with MR Imaging and Modeling: Initial Results. Accessed 23 July 2004. <http://radiology.rsna.org/cgi/content/full/221/2/515>

CPD past answers

Answers April 2005 issue	Answers November 2005 issue
Question 1 - (c)	Question 1 - (c)
Question 2 - (a)	Question 2 - (c)
Question 3 - (a)	Question 3 - (c)
Question 4 - (b)	Question 4 - (b)
Question 5 - (b)	Question 5 - (d)
Question 6 - (c)	Question 6 - (b)
Question 7 - (a)	Question 7 - (c)
Question 8 - (a)	Question 8 - (c)
Question 9 - (c)	Question 9 - (c)
Question 10 - (c)	Question 10 - (b)
Question 11 - (c)	Question 11 - (a)
Question 12 - (a)	Question 12 - (b)
Question 13 - (b)	Question 13 - (b)
Question 14 - (a)	Question 14 - (a)
Question 15 - (a)	Question 15 - (b)
Question 16 - (b)	Question 16 - (a)
Question 17 - (b)	Question 17 - (d)
Question 18 - (c)	Question 18 - (a)
Question 19 - (c)	Question 19 - (b)
Question 20 - (a)	Question 20 - (c)