Reviewer's report

Title: Value of Adenosine Infusion for Infarct Size Determination Using Real-Time Myocardial Contrast Echocardiography

Version: 1 Date: 25 December 2005

Reviewer: Albert Varga

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The study of Dourado et al aimed to evaluate the value of adenosine real-time myocardial contrast echocardiography to determine the infarct size in an open chest canine model. They concluded that real-time myocardial contrast echocardiography is a good method for the determination of necrotic area immediately following a myocardial infarction, and addition of adenosine only slightly increases the diagnostic accuracy.

This is a well written paper, with a decent methodological design. I have only minor comments and questions:

The real-time myocardial contrast echocardiography alone slightly underestimated the actual infarct size, however, the addition of adenosine in the majority of cases somewhat overestimated it. To this reviewer, the explanation of this finding was not too much explicit in the discussion section.

The Authors admit in the study limitations section that “Although myocardial blood flow quantification can provide information about myocardial viability after reperfuisional therapy, we considered that it was not necessary for the design of this study. Any explanation?

Figure legends: please correct the numbering
The quality of the figures could be improved

What next?: Accept after minor essential revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests' below