Reviewer’s report

Title: Coronary artery occlusions diagnosed by transthoracic Doppler

Version: 1 Date: 10 February 2014

Reviewer: Maurizio Galderisi

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Interesting study dealing with the ability of anterograde peak diastolic flow velocities and additional parameters (retrograde flow in main coronary arteries, reversed flow in septal perforating and left circumflex, demonstration of other epicardial or intra-myocardial collaterals) in predicting the main coronary occlusions of coronary angiography.

Figures are very impressive.

Major concerns

The protocol of the study appears to be time-consuming. Accordingly, it could be very useful to know the time of execution of each examination as well as the learning curve to achieve an acceptable level of technical skills in this field.

The feasibility of the overall procedure (comprehensive of all the chosen parameters is another critical issue. The authors should calculate it including also the three patients with “presumed insufficient acoustic windows"

A multiple regression analysis including all the suggested variables could be very useful to understand which variables predict independently the coronary occlusion.

The discussion is too long and should better point out comment on the main findings of the study.

Minor concerns

1. Some observations (reasons for measuring only peak diastolic velocities and other) shall be moved from the “Results” to the “Methods” section.

2. In the “Methods” section what is the meaning of “administrative reasons” among the exclusion criteria?

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Absence of competing interest