**Reviewer's report**

**Title:** Comparison of exercise, dobutamine-atropine and dipyridamole-atropine stress echocardiography in detecting coronary artery disease.

**Version:** 1  **Date:** 5 April 2006

**Reviewer:** Albert Varga

**Reviewer's report:**

Comments to the Authors

Nedeljkovic et al in this paper compared the diagnostic accuracy of 3 stress echocardiographic modalities (exercise and 2 pharmacological stressors: dipyridamole and dobutamine) in patients with suspected coronary artery disease. The author applied “state of the art” protocols, using atropine administration in case of submaximal tests. The final conclusion of the paper was that all protocols had a comparable and high diagnostic accuracy, and the addition of atropine was very useful in patients under beta-blocker therapy.

The concept of the work was clear the design of the study was acceptable. I have some minor comments, which, according to my opinion, could improve the quality of the manuscript.

- **Study population:** the data analysis was obtained in 117 patients, therefore, there is no need to stress out that 166 patients were evaluated. Moreover, according to the exclusion criteria, some patients were apparently not eligible for all 3 forms of stresses (I supposed that patients with severe hypertension or serious arrhythmias were not studied with dobutamine, and patients with chronic obstructive disease with dipyridamole).
- **32 patients had a previous non-transmural infarction. Did they have all normal left ventricular wall motion?**
- **Statistical analysis:** “Where appropriate, confidence intervals were calculated… “ However, the authors did not mention confidence intervals in the Results section.
- **Results:** the sensitivity and specificity of the tests were surprisingly high, taken into the account, that many patients were studied under antianginal therapy, or had one vessel disease and the criteria for significant coronary artery disease was quite low (=50%). Could you comment?
- **One speculative question:** the feasibility of the exercise echo was lower (although not significantly) than the feasibility of pharmacological stress. Did this finding influence the slightly lower sensitivity and diagnostic accuracy of the exercise stress echo?
- **Study limitations. Please, add a reference.**
- **There are many typographical errors, please correct.**

**What next?:** Accept after minor essential revisions

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

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