Reviewer's report

Title: The Prognostic Value of Dobutamine Stress Echocardiography Amongst British Indian Asian and Afro-Caribbean Patients: A Comparison with European White Patients.

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Reviewer: Albert Varga

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The aim of the Authors of the present study was to investigate the prognostic importance of dobutamine stress echocardiography (DSE) in three ethnic groups in the United Kingdom. They analyzed the data of 5324 patients who had had DSE and concluded that “DSE is a strong predictor of NFCE and all-cause mortality and provides predictive information beyond that provided by standard risk factors in three major racial ethnic groups. No major differences among racial and ethnic groups in the predictive value of DSE were detected.

The topic is interesting. I have the following comments and questions

Major Comments

My major concern is regarding the AIM of the present analysis. The Authors should convincingly explain why they think that there should be ANY difference in response to dobutamine stress (or in predictive power of DSE regarding fatal or non-fatal future cardiovascular events) in patients with different ethnicity? DSE is a diagnostic imaging modality for the assessment of hemodynamically significant coronary artery disease. Positive DSE occurs when there is a significant stenosis in a certain coronary artery. According to my knowledge, there are no data in the literature that there is a significant differences in coronary artery stenoses in different ethnic populations. If yes, the Authors should explain the previous findings in the introduction section and discuss their own findings in the discussion section comparing the present data with the previous findings. For instances, do the Authors have any data about the differences in predictive power of other diagnostic tests (such as perfusion scintigraphy or exercise ECG) in different ethnic populations? I do understand that there are differences in the OCCURRENCE and PRESENTATION of coronary artery disease in different ethnic populations. These differences had already been abundantly studied and described (as was acknowledged by the Authors); therefore the majority of the results of the present study can be considered as confirmatory.

Minor comments

1. NFCE should be explained also in the Abstract
2. The description of the dobutamine protocol is too long
3. According to my understanding the Authors did not administered beta blockers
after the termination of the dobutamine infusion. According to the recent recommendations, an antidote should be given in all patients at the end of the test regarding its outcome (positivity or negativity).

4. The sensitivity of the test was surprisingly high (94%), the specificity was acceptable (84%). Please give an explanation.

5. The “European white” patients where significantly older, however, the all cause mortality in this group did not differ from the mortality observed in the other groups. According to many studies the Age is a powerful predictor of all cause mortality therefore an explanation is needed at this point.

**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:**

I declare that I have no competing interests