Reviewer's report

**Title:** T786->C polymorphism of the endothelial nitric oxide synthase gene is associated with insulin resistance in patients with ischemic or non ischemic cardiomyopathy

**Version:** 1 **Date:** 6 August 2012

**Reviewer:** Thiago da Silva

**Reviewer's report:**

The authors have studied the association of endothelial nitric oxide synthase (eNOS) gene polymorphisms with insulin resistance (IR) in patients with ischemic or non ischemic cardiomyopathy. They found that T-786C polymorphism was a risk factor for IR (defined as HOMA-IR index> 2.5) between cardiomyopathy cases. Furthermore their results showed that IR was associated with the extent of LV dysfunction and the presence of heart failure (HF) in this population.

Abstract

Minor Essential Revisions

- Avoid using abbreviations. Essential abbreviations must be defined at their first mention in the abstract itself.

Methods

Statistical analysis:

Major Compulsory Revisions

- Normality tests must be performed before evaluating differences in means for continuous variables by Student's t test or ANOVA. If necessary, appropriate non-parametric tests should be used.
- The Fisher exact test is not appropriate to assess significant differences among pairs of means. Post hoc tests for multiple comparisons, such as Bonferroni test, should be performed for this purpose.

Results

Major Compulsory Revisions

- Tables 1 and 2. Age and sex are potential confounding factors and therefore should be introduced in the conditional logistic regression models. Thus, Odds Ratio (OR) values adjusted for gender and age should be reported in the tables.
- Contrary to what is stated in the third paragraph of the discussion section, the p value shown in Table 2 does not confirm the association between history of hypertension and insulin resistance. This point should be clarified.

References

Major Compulsory Revisions

- The style of reference is different from the requirement. Compare with one of
the published papers.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I declare that I have no competing interests.