Reviewer's report

Title: Relationship of 24-hour ambulatory blood pressure and heart rate with markers of hepatic function in cirrhotic patients

Version: 1 Date: 31 January 2010

Reviewer: Luis Olmedilla

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Hemodynamic alterations are associated with overall survival of cirrhotic patients. This paper study whether 24 hours ambulatory blood pressure and heart rate variations are associated with markers of liver disease severity.

Major revisions

I am not clear on the practicality of a 24 hours ambulatory BP and HR measuring to evaluate a poor liver function. It’s easier to measure classical biochemical markers in a blood sample.

A critical analysis of the findings is required in discussion:

- All the correlation factors are low. The best is 0.56 (office HR- renin). This can be translated in a coefficient of determination r^2 of 0.3136: 31% of the variation in HR can be explained by the renin variation. The correlation can be statistically significant but showing a weak association between the two variables. (Pace NL. Research design and statistics. In Clinical Anesthesia, Edited by Barash PG, Cullen BF and Stoelting RK. Philadelphia : Lippincott Company. Philadelphia, 1989: 45-68).

- The differences between the groups A and B, even significant, are very small (DBP office visit 1: 81 vs. 73, office visit 2: 79 vs. 72, asleep ambulatory 66 vs. 61). Why do the authors think there is not a significant difference in the HR?

- With the showed results, do the authors consider useful to measure the BP and HR to evaluate liver function?

- If a clear relation was showed, would the authors recommend to evaluate BP and HR ambulatory measurement in cirrhotic patients?

Methods:

It’s difficult to conclude something in Child C patients with only 4 cases. You must exclude them or include more cases.

Minor essential revisions

References:
I think diabetes patients must be excluded because they can have an autonomic dysfunction that can alter the hemodynamic results.

**Level of interest:** An article of limited interest

**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 interest's below.