Reviewer's report

Title: Methyleneetetrahydrofolate Reductase (MTHFR) C677T polymorphism and high plasma homocysteine in Chronic Hepatitis C (CHC) infected patients from the Northeast of Brazil.

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Reviewer: Helena Cortez-Pinto

Reviewer's report:

In the present study, the authors evaluated the interaction of one polymorphism of MTHFR with chronic hepatitis C, in what concerns genotype, degree of steatosis and fibrosis. They found an higher prevalence of TT in genotype non-1 and an association between the MTHFR genotype TT x CT/CC polymorphism and the degree of steatosis and fibrosis in both hepatitis C genotype. This is a well written manuscript, having however some problems, as detailed below.

Criticisms and suggestions:

1) My main criticism regards the finding that is more emphasized, that is the higher prevalence of TT in genotype non-1. Since it is difficult to find an explanation for that fact, the issue should be fully discussed in Discussion.

2) I would suggest the authors to focus more on the effect of the polymorphism on fibrosis and steatosis and how it correlates with homocysteine levels. In fact, it seems that if the polymorphism has an effect, it should be on the severity of chronic hepatitis, on the progression, or on the response to treatment. It would be of much interest having that kind of information (progression, response to treatment), according to the presence of the polymorphism for this group of patients.

3) The abstract is lacking some important information. In Methods there is no mention to the determination of plasma homocysteine levels. Furthermore, in Conclusions there are statements regarding the higher prevalence of hyperhomocysteinemia in CHC, that have not been mentioned in Results, where we only have information regarding the higher levels of homocystein in the presence of steatosis.

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

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.
Declaration of competing interests:

I declare that I have no competing interests