Reviewer's report

Title: Prohepcidin, inflammation and iron parameters in hemodialysis patients with chronic hepatitis C

Version: 1 Date: 17 January 2012

Reviewer: Vivekanand Jha

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In the introduction, they say they wanted to investigate whether "iron plays a role in alterations of iron metabolism in HD patients with HCV infection", how the measurement of prohepcidin will help that is not clarified.

HCV infection has been diagnosed only by antibody screening. Did they confirm this using NAT both in antibody positive and negative cases? If not, why? What is the prevalence of this infection in their unit?

A number of statistical tests have been applied, but it is unclear what do they convey. For example, the association between prohepcidin levels and different parameters in hep c +ve and -ve patients are totally different. What is the significance of these variations? Do these have any clinical significance? All these have not been discussed. Page 7 says "multiple regression analysis was performed to predict prohepcidin...". Multiple regression can only show association and not predict anything. What were the parameters entered in this model? What type of modeling was done?

One striking finding in the study is the lack of any difference between the prohepcidin levels in HD patients and healthy controls. What is the explanation of this finding, since almost all astudies show elevated levels in HD population.

Table 4 shows discordance between the levels of inflammatory markers. For example, IL-6 is higher in HCV-ve patients but hsCRP and TNF-a are in the opposite direction. The difference would be significant if the number of patients was more.

Table 1,2 and 3,4 could be easily combined.

The correlation between prohepcidin and ferritin is not a novel finding, and the scatterplots can be done away with.

The discussion does not try to dissect out the significance of the finding. They repeatedly mention hepatic iron stores which is not a subject of this study at all. This is a mere asosciative study and even that is weak. Hence making any kind of assumptions is premature. This has not been discussed

There is more literature on hepcidin levels in Hep C infected patients that the authors have not discussed. In fact some studies have shown elevated prohepcidin and IL-6 levels in these subjects. The authors have not discussed the possible mechanism of their finding of lower levels, especially in dialysis patients, as even decline in GFR leads to accumulation of hepcidin.
Level of interest: An article of limited interest

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

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

Declaration of competing interests:

I declare that I have no competing interests