Reviewer’s report

Title: The relationship between proton pump inhibitor use and serum magnesium concentration among hemodialysis patients: a cross-sectional study

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Reviewer: COSTAS FOURTOUNAS

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This is a single center cross sectional study regarding hypomagnesemia and the use of PPIs in hemodialysis (HD) patients.

The authors studied a total of 155 HD patients divided into a PPIs group (n=86) and a non PPIs group (n=69). The main finding is that the PPIs group presented statistically significant lower levels of serum Mg.

The findings seem interesting but there are some points that need to be clarified.

The authors implicate that HD patients have not significant residual renal function. They should add data regarding urine volume in both groups. What about high dose diuretics (furosemide) in some/any patients?

Hypomagnesemia in HD may also be a marker of chronic inflammation or a marker of poor nutritional status (Dousdampanis et al HEMO INT 2014;18: 730-9). So, the authors should investigate if markers of inflammation (CPR, etc) or poor nutrition (serum albumin, etc) may present differences between the 2 groups and be added in the multivariate regression model.

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