Reviewer's report

Title: Fibroblast growth factor-23 and calcium phosphate product in young chronic kidney disease patients: A cross-sectional study

Version: 3 Date: 12 January 2013

Reviewer: Gunnar Heine

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After its revision by a statistician, the study results are now better understandable. No major compulsory revisions remain to be done. Nonetheless, the authors should aim to address several minor issues:

1. Please specify whether the children analyzed in the present work have been recruited from earlier cohort studies (such as Wong H: Prevalence of complications in children with chronic kidney disease according to KDOQI. Kidney Int 2006, 70:585-590), or whether they specifically recruited for the present analyses?

2. The statements "As the presence of vascular calcifications was an exclusion criterion, our data would suggest that FGF-23 is associated with calcium phosphate metabolism disorders, and not with aortic calcifications." needs revision. First, we do not know whether patients were free of calcification (as hopefully not all patients underwent X-ray examination). Moreover, any association of FGF-23 with calcium phosphate will not exclude an association of FGF-23 with calcification.

3. "Therefore, FGF-23 levels may provide a reliable marker of calcium and phosphate imbalance. It may be easier to measure a single biomarker, and its association with endothelial dysfunction and cardiovascular outcome [13] make it an attractive marker." should be deleted. The authors found some correlation between FGF-23 and calcium-phosphate balance. They did not test whether FGF-23 is a valid indicator of CKD-MBD imbalance. Such statement would require much more solid data, including testing for sensitivity and specificity. Finally, FGF-23 measurement is much more expensive than calcium and phosphate measurement. Why should it be "easier" to determine FGF-23 than conventional lab values such as Ca / phosphate?

4. Calcium, phosphate, vitamin D, PTH and FGF-23 should be labeled CKD-MBD parameters rather than "markers of renal osteodystrophy".

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.