Reviewer’s report

Title: Cortical and trabecular bone are equally affected in rats with renal failure and secondary hyperparathyroidism

Version: 0 Date: 01 Oct 2017

Reviewer: Pascal Houillier

Reviewer’s report:

The authors made an attempt to uncover the mechanisms linking phosphate retention and bone disorders in early CKD.

Major concerns:

1. The model is acute rather than chronic kidney disease

2. The authors have been studying young rats with a high velocity of growth. Therefore, it is extremely difficult to distinguish the consequences of phosphate retention and those of altered growth due to impaired renal function

3. The authors claim being interested by the events occurring at an early stage of CKD. However, they performed 5/6 Nx and have not quantified renal function better than by creatinine measurement. A reliable assessment of renal function is required to show that experiments have been carried-out at early stages of CKD

4. The plots on Fig.7 are highly scattered and not quite convincing. In addition, they do not provide any insight into the molecular mechanisms going on as no attempt to interfere with any of the potential pathways has been made

Miscellaneous

1. The number of rats in each group is unknown

2. the values of Pi (Fig.6) must be checked

Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

No

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

No
Are the conclusions drawn adequately supported by the data shown?  
If not, please explain in your comments to the authors.

No

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?  
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I am able to assess the statistics

Quality of written English
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