Reviewer's report

Title: Renal papillary calcification and the development of calcium oxalate monohydrate papillary renal calculi

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Reviewer: Francesco Berardinelli

Reviewer's report:

I have reviewed the manuscript "Renal papillary calcification and the development of calcium oxalate monohydrate papillary renal calculi" and have the following comments for the authors:

1. This study aimed to determine whether the presence of calcified deposits in renal papillae is associated with the development of calcium oxalate monohydrate (COM) papillary renal calculi. How the authors can determine this association without any statistical analysis and without a controlled group?

2. From the recently collected papillary calculi, four patients with chronic stone formation requiring endoscopic nephrolithotomy were randomly selected: -how the patients are selected? -why were unrolled only 4 patients? -what are the inclusion criteria?

3. Case histories: I think could be better "medical histories"

4. In the introduction please specify to readers that papillary calculi are stones with detectable site of attachment to the renal papilla.

5. 4 patients is a too small sample to determine the association between calcified deposits in renal papillae and COM papillary renal calculi. Please specify this in the limitation of the study.

6. Intraoperative retrograde ureteroscopy:
   -to asses papillary calculi the correct procedure is the Flexible Ureterorenoscopy. Did the authors performed it?

7. Patient 1 and 2: Numerous subepithelial HAP deposits were present in the papillae of this patient:
   -What are the criteria to classified if presence of HAP deposit in the papilla is low or high? Is an objective or subjective criteria?

8. The higher the number of subepithelial calcifications, the greater the likelihood that some will be transformed into COM papillary calculi
- Is this a conclusion of this study? If so the author could explain which statistical methods they used to reach it. If this is a reference, please specify it!

9. The urine analysis is an additional information on patient, however it is irrelevant on the objectives of the study.

10. The limitations of the work are not clearly stated

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

**Quality of written English:** Not suitable for publication unless extensively edited

**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