Reviewer’s report

Title: Primary hyperoxaluria detected by bone marrow biopsy: A case report

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Reviewer: David Sas

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General: The authors report a single case of a patient who underwent osteomedullary biopsy which suggested hyperoxaluria. This is conceptually interesting as there are only a few cases of detection of primary hyperoxaluria (PH) via bone biopsy. The primary weakness of this paper is distracting language errors that are severe enough to make the content unclear. Utilization of an English-speaking proofreader is strongly recommended prior to re-submission. Also, much of the discussion regarding primary hyperoxaluria is incorrect, though it is not clear if this is due to lack of familiarity with the facts of PH or just difficulty expressing the information in English. Finally, the authors have overstated the certainty of the diagnosis of PH given that there is no genetic diagnosis, evidence of elevated plasma oxalate, or evidence of hyperoxaluria (due to the patient's anuria). While it is very likely that this patient has PH, the diagnosis cannot be conclusively made by modern standards with the data provided.

Abstract:

1. The mechanism of PH is not overproduction of calcium oxalate, but rather oxalate.

2. The authors should not state that they were able to diagnose PH based on the presence of calcium oxalate crystals in bone. It may be suggestive, but it is not diagnostic.

Introduction:

1. The authors state that their case "is the only one that does not show bone lesions." Are the calcium oxalate crystal deposits, medullary fibrosis, and inflammation not considered lesions? Please clarify.

Case presentation:

1. What is meant by "an altered general state." Please provide more detail.

2. Were serum iron studies performed? This would be part of the standard evaluation of a patient with anemia resistant to erythropoietin therapy.

3. What is "NFS"?
4. Why is it relevant that the patient had an aneurysm?

5. The authors state that it was possible to carry out urinary sediment examination, but fail to reveal the results.

6. Again, the presence of calcium oxalate deposits in bone is not diagnostic of primary hyperoxaluria. (See Marangella et al. "Bony content of oxalate in patients with primary hyperoxaluria or oxalosis-unrelated renal failure" from Kidney International 1995.)

7. In the final paragraph of the Case Presentation section, the authors state that "the patient must wait several months before benefitting from genetic study." Does this suggest that genetic testing is pending? If so, the authors should postpone submitting this current manuscript until a genetic diagnosis is confirmed. The paper will be much stronger if the diagnosis is confirmed.

Discussion:

1. The authors should include the reference Soliman et al. "Clinical spectrum of primary hyperoxaluria type 1: Experience of a tertiary center" in Néphrologie & Thérapeutique 2016 as it relates to PH in a similar patient population.

2. The statement "All these manifestations evolve very rapidly towards renal insufficiency" is not true as progression to CKD and ESRD is quite variable in patients with PH. Some do, indeed, progress to ESRD quickly, but many never have renal failure.

3. The proper way to diagnose PH deserves some discussion. Understanding that the limited resources in the authors' home country preclude standard diagnosis, reader would still benefit from knowing the proper way to proceed toward diagnosis of PH. The evaluation would include quantification of urinary oxalate excretion, as well as other related urinary metabolites like glycolate, glycerate, and 4-hydroxy-2-oxoglutarate (HOG). Additionally, plasma oxalate level should also be measured. Finally, diagnosis can be confirmed by genetic testing or, less commonly nowadays, liver biopsy.

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

Yes

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

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
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