Reviewer's report

Title: Giant cystic parathyroid adenoma presenting with parathyroid crisis after Vitamin D replacement

Version: 1 Date: 18 June 2012

Reviewer: John H. Yim

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Major Compulsory Revisions

1. Abstract - In general, vitamin D deficiency does not protect patients with primary hyperparathyroidism. Most patients do not develop life threatening hypercalcemia from vitamin D replacement. In general, vitamin D replacement may unmask subclinical hyperparathyroidism. This is an unusual case.

2. Background - It should be stated that: "When parathyroid cysts have been identified before biochemical work-up it has been documented that approximately 10% are functional [5]; however, when cervical exploration is performed for both hyperparathyroidism or cervical mass cystic parathyroid lesions are seen in up to 4% of patients [8,10], and are much more commonly than non-functional parathyroid cysts [10]."

3. Case Presentation - Parathyroid Hormone should be more specific, such as intact parathyroid hormone level or intact PTH level, e.g. It should be documented whether the cyst had ruptured.

4. Discussion - Once again it should be documented that in most cases vitamin D replacement does not result in life threatening hypercalcemia.

5. Conclusion - Once again it is excessive to state that vitamin D deficiency is protective. The patient may have become dehydrated for other reasons which may have precipitated the crisis.

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

Quality of written English: Needs some language corrections before being published

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