Reviewer’s report

Title: Acute airway compromise due to parathyroid tumour apoplexy: An exceptionally rare and potentially life-threatening presentation

Version: 0 Date: 25 May 2017

Reviewer: Frédéric A. Sébag

Reviewer’s report:

Introduction:

Introduction sentence could be changed to: "Parathyroid adenoma spontaneous haemorrhage is a rare presentation and an exceptionnal potentially life-threatening presentation."

Case presentation:

The author should clearly distinguish the different entities. In this case, it is: haemorrhage of a cystic parathyroid adenoma. Cystic parathyroid adenoma (or parathyroid pseudo cyst) is a different entity from (essential) parathyroid cyst. The latter one is non secreting, with a crystal clear cyst. Usually, parathyroid haemorrhage occurs on pathologic glands (adenom, hyperplastic).

Very interesting point that PTH level fell prior to surgery, indicating parathyroid adenoma infarction or efficiency of drugs. The authors should add a comment on that. The authors were right to propose surgery regarding to airway consequence but also the high probability of HPT recurrence without surgery.

Regarding the age (<50), and the clinical history (probably long lasting HPT regarding Calcium and PTH level), the patient requires genetic testing.

The author should comment on initial US results. Was the radiologist used to parathyroid evaluation? or the adenoma could have been probably deeply located in the neck?

Regarding surgery, did the surgeon use intraop PTH assay? NIM?

The authors should comment on the decision of removing the right thyroid lobe, even if we agree with this strategy. In order to achieve a complete excision? risk of malignancy?

As the author analysed litterature, what was the proportion of life threatening parathyroid hematoma (air way compression, haemorrhage)?

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.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Yes

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Acceptable

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