Reviewer's report

Title: Paroxysmal hypertension secondary to a periprostatic pheochromocytoma: case report and review of the literature.

Version: 1 Date: 3 July 2013

Reviewer: Andre Faria

Reviewer's report:

The article by Kers et al. describes a very rare presentation of an extra-adrenal catecholamine-secreting tumor and the report should add to the existing literature. However, there are several flaws and minor and major issues to be addressed.

1. Please note that the correct nomenclature for extra-adrenal pheochromocytomas is paragangliomas. Therefore, anywhere in the text referred as “pheochromocytomas” should be changed to “paragangliomas”, including the title.

2. Line 5: change “het” to “he”.

3. Line 8: please specify which drugs and what doses was the patient on.

4. Line 9: better to write “…which was presumed initially to be due to white coat phenomenon.”.

5. Line 9-10: better to write “Figure 1A illustrates…at that time which did not confirm this hypothesis, showing a sustained hypertension pattern.” (this is what the chart shows and, therefore, the title of the article should also be corrected).

6. Line 12: change “non-insulin dependent” for “type 2” and “macula degenerative disease” for “macular degeneration”.

7. The authors affirm that the patient suffers from iron-deficiency anemia but do not present any biochemical iron studies. Please note that anemia is not a common presentation of pheochromocytoma/paraganglioma (and this should be mentioned in the text). Rarely, erythrocytosis may occur. In the described setting, other underlying causes of anemia should be sought (anemia of other chronic underlying disease?). This part should be much more detailed since the anemia probably has nothing to do with the main diagnosis. It would be interesting to add a table with general blood tests including the complete blood count (including MCV and MCH indexes) as well as other tests such as renal and liver function studies, electrolytes, etc.

8. Line 18: please correct “reason FOR referral”.

9. The authors also describe that the patient did not experience LUTS (e.g. dysuria, nocturia, frequency, etc) but did he report any symptoms while voiding (e.g. headaches)? If not, deny in the text.
10. Line 21: What complaints have changed?
11. Line 24: please add description of the tumour enhancement pattern following contrast.

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1. Line 7: figures should be described in the sequence they appear in the text. Therefore, this should be Figure 2D.
2. Line 15: Add calcium metabolism (PTH, 25OH Vitamin D, etc) to previously suggested table.
3. Line 16: Please note that primary hyperparathyroidism is a component of MEN2A but not of MEN2B. Also add to discussion if there are criteria for indications of surgery for this disease (osteoporosis, decrease in renal function, etc) using current guidelines and if further surgery was planned.
4. Line 20: Octreotide scintigraphy (Octreoscan) is not a commonly performed test while searching for paragangliomas and did not give any further clue (since MIBG was positive) in this case. This should be excluded from the discussion.

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1. A stepwise approach based on the clinical scenario, rather than screening for every disease-causing gene, is generally recommended since it is more cost-effective. This should be added to the discussion. In this case of an abdominal paraganglioma, for example, a more rational approach would be to screen initially for RET (because of the associated PHP, although extra-adrenal pheochromocytomas are rare in this syndrome) followed by SDHB, SDHD and VHL (see Welander et al. Endocr Relat Cancer. 2011 Dec;18(6):R253-76).
2. Line 6: “Figure 2F” should read “Figure 2E”.
3. Ideally, patients should be started on alpha-blockade at least 10-14 days before surgery is planned – this should be discussed (see Pacak. J Clin Endocrinol Metab. 2007 Nov;92(11):4069-79). Please also specify the doses of each medication. What formulation of nifedipine was used (Slow release? Short acting?)? Why was metoprolol added to the regimen?
4. Line 18: Was drug treatment optimized after the 1-month visit since it was above target BP recommendations?
5. Line 19: “Figure 2E” should read “Figure 2F” and it should be specified that this picture represents the macroscopic specimen.

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The conclusions section is poorly written. It should be much improved with the previously discussed points. Additional points:
1. Line 5: change “by incidence” for “incidentally”.
2. Lines 21-23: change for “In the case presented in the current manuscript, the patient had been diagnosed with hypertensive cardiomyopathy two years before the diagnosis of the paraganglioma.”
3. Line 25: “…in the context of a GENETIC syndrome…”

**Level of interest:** An article of importance in its field

**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