Reviewer’s report

Title: Multihormonal pituitary adenoma concomitant with Pit-1 and Tpit lineage cells causing acromegaly associated with subclinical Cushing’s disease: a case report

Version: 0 Date: 24 Apr 2017

Reviewer: Rachel Crowley

Reviewer's report:

The authors have described a case of a patient with clinical evidence of acromegaly and some evidence of autonomous hypercortisolism (in line with recent guidelines this might be a more appropriate term to use than SCD).

The manuscript would benefit from additional information:

What was the frequency and dosage of OCT-LAR?

What was the peri-operative management with regard to hydrocortisone / cortisol status assessment?

Was the patient assessed for a germline genetic disorder?

Is the 0.5mg dexamethasone a 48 hour test with dex every 6 hours, or a single dose of 0.5mg?

What is meant by pseudopapillema on histology?

What is meant by ACTH stained cell in the cytoplasm and Pit1 stained cell in the nucleus?

Please give details of the non-functioning adenoma and Cushing's adenoma used for comparison.

Note reduction of 11bHSD1 alone should not lead to failed dexamethasone suppression unless there is co-existing Cushing’s disease

(see Tomlinson paper JCEM 2002)

Suggest change line 278 to read HPA axis in acromegaly

Correct spelling transsphenoidal line 90 and change to 'with SCD' in line 136.
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?  
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

Declaration of competing interests  
Please complete a declaration of competing interests, considering the following questions:

1. Have you in the past five years received reimbursements, fees, funding, or salary from an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

2. Do you hold any stocks or shares in an organisation that may in any way gain or lose financially from the publication of this manuscript, either now or in the future?

3. Do you hold or are you currently applying for any patents relating to the content of the manuscript?

4. Have you received reimbursements, fees, funding, or salary from an organization that holds or has applied for patents relating to the content of the manuscript?

5. Do you have any other financial competing interests?

6. Do you have any non-financial competing interests in relation to this paper?
If you can answer no to all of the above, write 'I declare that I have no competing interests' below. If your reply is yes to any, please give details below.

'I declare that I have no competing interests

I agree to the open peer review policy of the journal. I understand that my name will be included on my report to the authors and, if the manuscript is accepted for publication, my named report including any attachments I upload will be posted on the website along with the authors' responses. I agree for my report to be made available under an Open Access Creative Commons CC-BY license (http://creativecommons.org/licenses/by/4.0/). I understand that any comments which I do not wish to be included in my named report can be included as confidential comments to the editors, which will not be published.

I agree to the open peer review policy of the journal