Reviewer’s report

Title: Evaluation of the thyroid characteristics of patients with growth hormone-secreting adenomas

Version: 0 Date: 28 Jun 2019

Reviewer: Christian Happel

Reviewer’s report:

Comments to the Author

The study of Dianshuang Xu et al. evaluates the characteristics of the thyroid in patients with growth hormone secreting adenomas. The authors perform a systematic retrospective monocentric analysis in 134 consecutive patients with growth hormone secreting adenoma and non functioning pituitary adenoma.

Despite a significantly improved alimentary iodine supply in most parts of the world, thyroid disorders are still a common clinical problem. Due to compression of trachea and esophagus thyroid nodules often cause local symptoms and can even lead into a life-threatening respiratory crisis. Mitigation of patients' suffering and prevention of malignant reorganization makes a treatment of several of those nodules inevitable. The topic of the study of Dianshuang Xu et al. is therefore important and of interest, because acromegaly is known to be highly associated with thyroid disorders.

The design of the study of Dianshuang Xu et al. is adequate and its methodology and statistical analysis are appropriate for its stated aim. The intention for the study is as well presented adequately and the results are clear-cut. English grammar and style are appropriate.

The authors did well to summarize the clinical background and discuss current literature. Although they admit the limitations of their study which are the small sample size and the short period of follow up. Altogether, the manuscript is well written and not too long.

I have only a few minor comments:

Abstract:

Please announce NF when you use the abbreviation for the first time (line 12 on page 2). It is true that you append the abbreviations at the end of your manuscript, but I think an explanation should appear already in the abstract.

In the conclusion you state that surgery significantly changed solid nodules to cystic nodules in patients with growth hormone secreting adenoma and reduces the number of heterogeneous and vascular thyroid nodules. Could you please add a short explanation of the reasons for this?
Methods / Fine needle aspiration biopsy (FNAB):

In the first sentenced of this section you state that fine needle aspiration biopsy was performed by a practitioner on patients with "goiter" volume exceeding 1 cm³ or a node with two or more of diverse signals. Is this true or should this sentence should better be replaced by "fine needle aspiration biopsy was performed by a practitioner on patients with "nodule" volume exceeding 1 cm³ or a node with two or more of diverse signals".

In my opinion there is a typing error in line 28 on page 5: the word "flu" should be replaced by "flow".

Results:

There is much information from line 27 on page 6 to line 3 on page 7 which is very difficult for the reader to realize. Maybe you can put this section in a table to relieve readability.

After consideration of the above mentioned minor revisions the manuscript is in my opinion appropriate for publication in BMC Endocrine Disorders.

With many regards,

Yours sincerely,

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.

I am able to assess the statistics
Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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