Reviewer’s report

Title: Thyroid Rosai-Dorfman disease with infiltration of IgG4-bearing plasma cells associated with multiple small pulmonary cysts

Version: 0 Date: 26 Dec 2018

Reviewer: E Radzikowska

Reviewer's report:

Please include all comments for the authors in this box rather than uploading your report as an attachment. Please only upload as attachments annotated versions of manuscripts, graphs, supporting materials or other aspects of your report which cannot be included in a text format.

Please overwrite this text when adding your comments to the authors.

The authors presented very interesting case of Rosai-Dorfman disease (RDD) with possible lung involvement.

The manuscript touches very rare and difficult clinical problem, however the diagnosis requires supplementations.

Only few cases of cystic lung lesions in the course of RDD have been presented in the literature. All of them were proved by open lung biopsy and CT pattern was different than in presented case. Harlander et al showed the nodular lesions with thickening of the pleura and lung cysts. Certin-Ceba et al showed bilateral, subpleural reticular opacities, bilateral scattered areas of ground glass attenuation, mild traction bronchiectasis in the bases, and a few tiny cystic lesions were present in the upper lung fields, but no honeycombing was present.

In described case only small tiny cyst, probably without special distribution, was shown. There were no lymph nodes enlargements, nodules, reticular changes and pleural thickening.

It is impossible to rule out the LAM, even though there was no AML or lymphangioleiomyoma and low concentration of VEGF-D (the lung lesions in this case are not prominent, and usually in LAM cases with this type of changes the level of VEGF-D is low).

In addition Birt-Hogg-Dube syndrome should be excluded by the genetic testing.

I think that lung lesion requires more precise diagnostic: BAL examination, transbronchial biopsy (cryobiopsy) or open lung biopsy.

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.

No

**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 no conflict of interest
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