Reviewer's report

Title: Usefulness of core needle biopsy for the diagnosis of thyroid Burkitt's lymphoma: a case report and review of the literature

Version: 1 Date: 14 Sep 2018

Reviewer: I. Cozzolino

Reviewer's report:

The objectives of this paper "Usefulness of core needle biopsy for the diagnosis of thyroid Burkitt's lymphoma: a case report and review of the literature" are to clarify the diagnostic significance of the thyroid CNB for the early diagnosis of thyroid lymphoma, and in particular of Burkitt Lymphoma, and propose the CNB as a useful diagnostic approach to avoid surgery. This diagnostic approach for thyroid nodules is not currently the gold standard but may be a valuable tool for non-surgical diseases such as lymphoproliferative processes.

However, the work needs some improvements.

Case presentation:

"In has been argued that patients with suspected thyroid lymphomas require excision or core needle biopsy for diagnosis [7]. ".....It should be moved to the discussion.

The authors should actually clarify whether the decision to perform the CNB was made following a multidisciplinary decision. CNB was performed after the FNC ?! Or It was performed simultaneously with FNC after on-site evaluation of the cytological sample ?!

The microscopic description of the CNB is really bare. The diagnosis was only morphological? Immunohistochemistry has been performed?! Or other ancillary techniques such as FISH.

Discussion:

"...... a specimen that is adequate not only for immunohistochemical stainings, but also for histological analysis" ......the authors should clarify this expression.

Furthermore, they should clarify the possible ancillary techniques applicable on CNB and their diagnostic accuracy.
The references are adequate; they should be expanded on the basis of any changes in the discussion.

The figures are adequate.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**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

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