Reviewer’s report

Title: Elastography for the Diagnosis of High-Suspicion Thyroid Nodules Based on the 2015 American Thyroid Association Guidelines: A Multicenter Study

Version: 0 Date: 12 Dec 2019

Reviewer: Ewelina Szczepanek-Parulska

Reviewer's report:

The paper by Li Hairu et al. represents an original study on the diagnostic performance of sonoelastography with the assessment of strain ratio in the differential diagnosis of thyroid lesions. This is a multicenter study conducted in the region of China. The study is well performed and presented. However, there are some corrections that need to be addressed before it can be considered for re-evaluation.

The paper should be corrected by a professional editing service or English native speaker - there are some stylistic and grammar mistakes i.e. p.2 line 23 - indicators/indications, the/which; line 56 - Kwak's/Kawk; line 58 discrepancy/discrepency; p. 4 line 9 - "they shoud were not changed..." - this sentence should be corrected; line 18 - the expression windpipe is rather colloquial - the term trachea should be used instead; line 25 the word classified should be used instead of separated; line 57 - "showed the absence of lesion" - correct the style

In "authors' contributions" the word „drafted" should be used instead of draft

In figure legends: 1. Nodules instead of nodule and - I have doubts regarding the histopathological term fibroadenoma? Please check for accuracy the histopathological diagnosis - maybe colloid or follicular adenoma?

In the Figure 1 - in the upper panel I would leave only „1903 thyroid focal lesions" without the second part of the sentence

Authors should also pay attention to the use of the word nodules - as it should be rather reserved for the lesions which are palpable - if the lesions are detected only by the means of ultrasound examination, the terms „focal lesions" or „lesions" should rather be used

page 6 line 39 - do not use italics when presenting p values

page 7 line 2 and several more times throughout the whole manuscript - please present extremely significant p values as p<0,001 not p=0,000

Authors write that this was a multicenter study - there should be indicated how many and what centers participated. Authors also state that only two examinators performed an analysis - how this was possible in all those centers? The results were recorded and then re-analysed?

Do I understand correctly that authors included only suspicious or highly suspicious lesions? Authors should specify what was the characteristics of these lesions at the beginning of the methods paragraph, when authors first use the term.
The manuscript lacks strong indication about the strengths of the manuscript and what makes it unique in the background of other similar studies concerning the same issue? Was it the number of the patients or lesions selection?

Authors may provide an attempt to compare the diagnostic performance of strain ratio sonoelastography and shear wave sonoelastography in the discussion section

I would ommit the sentence stating in the discussion section that sonoelastography has the power to replace the FNA - it is still rather considered as a helpful option and another diagnostic technique to evaluate preoperatively and non-invasively thyroid lesions. However, still the FNA is a gold standard in the management of thyroid nodules.


**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

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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

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