Reviewer's report

Title: Tuberculosis Lymphadenitis Diagnosis in children Using Fine Needle Aspiration in Bangui

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Reviewer: Ian Kitai

Reviewer's report:

This article describes the use of fine needle aspiration in children with lymphadenopathy in a country with a high prevalence of TB and HIV infection.

The overall findings are significant and important. Confirmation of the diagnosis of childhood TB, a paucibacillary disease is always difficult but important both for diagnostic purposes and to obtain sensitivities of culture. This is relevant not only for the individual patient but to monitor the overall prevalence of drug resistant TB in the region.

I think the paper is definitely worth publishing but requires significant editing. The major issue is the merging of results and discussion. These really should be separate. The results section should include hard and verifiable facts, found through the study. The discussion section may include hypothesis and should be definitely kept separate.

I began some attempts at editing the material along these lines and will attach a version. These are very preliminary edits and will require more work. Once this is done it will be a lot easier to review the paper.

I have some initial concerns that need to be addressed during the rewrite.

Materials and Methods:

The definition of lymphadentitis (line 99) should appear in the methods section (not results)

Was there specific positioning used for different groups? In general who held the child- if known- What size of syringe was used? What happened to the material- was some placed on a slide and fixed, or was all sent for culture. What was sent- material in a separate container (what type of container) , or the needle and syringe? Is there an estimate of the delay between aspiration and inoculation? Was a dressing applied after? This is important for those who may decide to use this method.

If more than one node was sampled was this using a different needle or the same needle?
The methods section does not include the type of microscopy used. The discussion, it mentioned LED microscopy but was this case for these patients?

Results section:

In the result section, it is unclear which node(s) was/were sampled (in comparison to the node/s which the child was said to have presented with). These data may not be in available and don’t preclude publication but they are important if present.

The safety of the procedure is important. There is no mention of any complications such as hemorrhage or secondary infection or the development of sinuses. Were these explicitly assessed? Were any side effects found passively. These may not have been monitored: this should be acknowledged as it could be an issue that needs further study.

In addition, the procedure is said to be suitable for use by nurses in clinics, but is unclear who performed the test in this study.

Following edits the document should be reviewed in more detail However I think it’s important work that should be published. Nonetheless, I strongly think it is very important work that should be published.

**Level of interest:** An article of importance in its field

**Quality of written English:** Needs some language corrections before being published

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have no competing interests