Reviewer’s report

Title: Ainhum, a rare mutilating dermatological disease in a female Cameroonian: a case report

Version: 0 Date: 04 May 2019

Reviewer: Jonathan Dale Ho

Reviewer's report:

The authors report an interesting case of Ainhum, the first reported out of Cameroon. Please note the following recommendations:

General Comments:
The paper needs a thorough proofing for grammar, sentence structure and spelling errors.

Specific Comments:
1. Abstract, conclusion: "...presented a case of ainhum, apparently the first in the Cameroonian literature". This statement is not needed multiple times in the paper. Furthermore, while it may be the first reported case in Cameroon, it is likely not the first case seen.

2. Abstract, conclusion: "...serious complications of ainhium sucg". Please correct the spelling of 'such'

3. Introduction: Please fix the direction of the quotation marks in the first sentence.

4. Background: "The word "Ainhum" derived from the Nago word (Brazil) meaning 'fissure' or the Yoruba word (Nigeria) meaning 'to saw or cut'[1], is a relatively rare idiopathic skin disease characterized by insidious development of a fibrotic constricting band or ring on any phalange (finger or toe) leading to spontaneous auto-amputation in severe cases with consequent permanent deformities, physical handicaps and psychological trauma [2-4]." This should be 2 sentences. Please adjust.

5. Case presentation: "Also, she was a non-alcoholic and nonsmoker." Is her alcohol use relevant? If so, perhaps the phrase "she did not use alcohol" may read better.

6. Case presentation: "On examination of the right foot, the fifth toe was separated from the rest of the foot by a circular band at its base. The band was like soft tissue constriction over the proximal interphalangeal joint initially". At the point of Figure 1, there is no separation of the toe. Perhaps just describe the presence of a constriction band. The term "like soft tissue" is ambiguous. Please clarify.

7. Case presentation: "There was bilateral plantar hyperkeratosis.". This hyperkeratosis is seen in the photographs. This is an interesting finding which can be seen in both ainhum and pseudoainhum. The authors mention in their discussion that they cannot entirely exclude pseudoainhum. Please expand on this given the presence of keratoderma of the sole. Specifically, give pertinent negative regarding the
absence of clinical features classically seen in the keratodermas associated with psuedoainhum. In some of the early reports of ainhum, frambesial hyperkeratosis is noted and in others just non-specific plantar hyperkeratosis is seen. Is currently yaws endemic in this region?

8. Case presentation: "stage 4 ainhum with almost auto-amputation". The authors use this phrase on occasion in the manuscript. Perhaps, "impending" or "near amputation" would be better.

9. Discussion: "isolated big toe involvements". Please use the term "great toe" or 1st toe

10. Discussion: "Also, histology examination was not performed in our case, but previous reports have shown collagen thickening of the stratum corneum near the fibrous band, hyperkeratosis or acanthosis of the epidermis and the presence of Lymphocytes and fibroblasts in the dermis in response to tissue damage and the chronic inflammation". Please clarify the histopathologic findings. Collagen thickening cannot occur in the stratum corneum as collagen is a dermal structure and the stratum corneum is an epidermal layer. Lymphocytes should not be capitalized.

11. The photographs appear somewhat blurred. Higher quality images should be provided if available.

**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.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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.

No conflicts of interest to report

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