Author’s response to reviews

Title: Madurella mycetomatis infection of the foot: a case report of a neglected tropical disease in a non-endemic region

Authors:
Basma Karrakchou (karrakchou.basma@gmail.com)
Ibtissam Boubnane (ibtissam.boubnane@gmail.com)
Karima Senouci (k.senouci@gmail.com)
Badreddine Hassam (hassambadreddine@gmail.com)

Version: 2 Date: 03 Nov 2019

Author’s response to reviews:

Thank you for your response, all comments were reviewed as showed in the manuscript.

Editor Comments:
We note that you state your reasons for not performing PCR or MALDI-TOF "These techniques are not available in Morocco nor in many countries worldwide." This statement is not accurate since articles conducted in Morocco and worldwide report these techniques. In your discussion and conclusions section, please instead state that these techniques were not used and discuss it as a limitation of your work. When discussing your research limitations, do not just provide the list of shortcomings of your work. It is also important for you to explain how these limitations have impacted your research findings.

Where applicable, please revise the limitations of your study taking into consideration the following points:
- describe all limitations of the study and explain their relevance;
- explain the nature of the limitations and justify the choices you made during the research process;
- assess the impact of each limitation to the findings and conclusions of your study;
- suggest how the limitations could be overcome in the future.

Response:
Added:
The absence of MALDI-TOF and PCR analysis are major limitations of the present report. The development of soft ionization techniques for mass spectrometry such as MALDI-TOF (Matrix-Assisted Laser Desorption Ionization Time-Of-Flight) allows a large panel analysis of specific species biomarkers. MALDI-TOF is more accurate than conventional phenotypic techniques in species identification with a lower cost per identification and a faster result. Indeed, MALDI-TOF is performed directly on samples without prior culture, which is useful for non-cultivable or slow-growing microorganisms [16]. Fungal DNA detection by PCR (Polymerase Chain Reaction) is also a technique used for species diagnosis. Molecular biology is performed on
samples without a former culture. Unfortunately, it doesn’t always discriminate species, and other targeted genes are required. In addition to the high cost, this technique requires high expertise and should be reserved for non-cultivable microorganisms [17]. Moreover, MALDI-TOF and PCR were not used in our patient because of their lack of availability at the University Hospital of Rabat, Morocco. Their use would have decreased the required time for the species diagnosis but has no impact on the therapeutic choice in this case. Indeed, the black color of the grains on direct examination directs towards six possible fungal species (Table 2), and can already give a therapeutic orientation. It has been opted in our case for classical methods for species diagnosis (direct examination and grain culture) considering their low cost and accessibility, and their sensitivity and specificity.

If improvements to the English language within your manuscript have been requested, you should have your manuscript reviewed by someone who is fluent in English. If you would like professional help in revising this manuscript, you can use any reputable English language editing service. We can recommend our affiliates Nature Research Editing Service (http://bit.ly/NRES_BS) and American Journal Experts (http://bit.ly/AJE_BS) for help with English usage. Please note that use of an editing service is neither a requirement nor a guarantee of publication. Free assistance is available from our English language tutorial (https://www.springer.com/gb/authors-editors/authorandreviewertutorials/writinginenglish) and our Writing resources (http://www.biomedcentral.com/getpublished/writing-resources). These cover common mistakes that occur when writing in English.
Response:
Language was checked and improved.