Author’s response to reviews

Title: Mycobacterial infection of breast prosthesis a conservative treatment a case report

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Author’s response to reviews: see over
Re: Revision of case report MS: 2034547184116336_point by point response

Dear Mr Nazareno,

We thank you for accepting our case report in BMC Infectious Disease.

Kindly find attached a revised version of our manuscript entitled “Mycobacterial infection of breast prosthesis – a conservative treatment: a case report” which we uploaded by following your instructions in the email of January 29, 2014.

Your comments were highly insightful and enabled us to greatly improve the quality of our manuscript. All the changes in the text are highlighted in yellow. We hope that the revisions in the manuscript and our accompanying responses will be sufficient to make our manuscript suitable for publication in BMC Infectious Disease.

In the following text are our point-by-point responses to each of the two reviewers’ comments.

Reviewer 1: Brian Kendall

1. Firstly, none specific inflammatory changes were found on the tissue histopathology.

2. Regarding the microbial culture collection, the whole prosthesis was analyzed for microbial pathogen detection in Lebanon. Then a prosthetic specimen was sent to France where the definitive mycobacterial culture revealed the presence of *Mycobacterium canariasense* in the prosthesis.

3. A periprosthetic space swab culture was performed into the space between the prosthesis and the breast wall; the space is not fluid. Besides, as explained above in point 2, a specimen isolated from the prosthesis in the initial laboratory was sent to France for culture.
4. As regards the antibiotherapy, it was empirical. It is also worthy to note that clindamycin was prescribed by the infectious disease specialist without performing antimicrobial susceptibility testing.

5. *M. canariasense* is typically susceptible to ciprofloxacin. It was listed as typically intermediate to this antibiotic in the next sentence because of a typing error which is now corrected.

6. When it comes to the sixth comment about the duration of antibiotic therapy before the identification of *M. canariasense*, the patient was treated for 10 days with Augmentin® 2g/day and ciprofloxacin 500 mg twice daily. Furthermore, the patient did not require multiple surgical interventions as the re-implantation was performed immediately after the removal of the infected prosthesis during the same surgical intervention.

7. Mr Kendal mentioned in his last comment that “rapidly growing mycobacterium are clearly associated with breast prosthesis infections. I would expect that many different species will be reported with time but closely related mycobacteria causing similar infections is not particularly noteworthy”. In fact, our manuscript has the merit to report the case of a breast prosthesis infection with atypical and rapid-grower nontuberculous mycobacteria (NTM) for which there is very little in the literature about its potential to cause infection. More importantly, the surgical and pharmacological management of the patient was successful given the very good aesthetic results in the patient.

**Reviewer 2: Christopher CZaja**

1. Identification of M. canariasense was performed at the National Reference Center on Mycobacteria of Pitié-Salpêtrière hospital in Paris, France. First, the Minimum Inhibitory Concentrations (MICs) were obtained from Rapid Growing Mycobacteria Plate Format (RAPMYCO) Sensititre plates in Mueller-Hinton medium incubated for 7 days. The pathogen identification was done by sequencing the gene of the Heat Shock Protein (HSP).

2. Table 1 of the manuscript displays the susceptibility results of M. canariasense after its identification at the National Reference Center on Mycobacteria of Pitié-Salpêtrière hospital in Paris, France.

3. Regarding the use of clindamycin, as explained above to the first reviewer, Mr Kendall, in point 4, the antibiotherapy was empirical and clindamycin was prescribed by the infectious disease specialist without performing antimicrobial susceptibility testing.
4. We finally emphasized the importance of surgery including removal of the prosthesis, irrigation and debridement in treating NTM surgical site infection, as recommended by Mr CZaja. Of note, when reviewing our own experience with the infected breast implants after reconstruction for malignancy, early and aggressive surgical intervention resulted in immediate implant salvage, which has a positive impact on the patient’s psychological health. These topics are substantially discussed in the case report. Changes made to the discussion are also highlighted in yellow.

Once again, on the behalf of myself and my co-authors, we thank you for accepting our manuscript in BMC Infectious Diseases.

Yours sincerely,

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