

Reviewer's report

Title: Microbiological Fallout From Hydrodebridement of Wounds

Version: 1 **Date:** 15 December 2008

Reviewer: Nicoletta Frescos

Reviewer's report:

The research presented is very interesting and of importance to those practising in the field of wound management. The write up however would benefit from a major compulsory revision.

The following are my comments in order of importance on areas that require clarification and revision:

1. Although this is a low risk project was ethics approval obtained?
2. The methodology in some parts is unclear and does not flow, which makes it difficult for the reader to obtain an understanding of the processes undertaken.

My knowledge of microbiology is limited however I have a few questions relating to the environment the research was conducted which maybe contributing factors that impact the results.

- 2.1 what size was the room and would this impact the aerolization?
- 2.2 was the air tested prior to the research?
- 2.3 was the room air controlled according to infection control standards for surgical procedures?
- 2.4 was the air tested prior to each meat being debrided?
- 2.5 were all 4 meats debrided consecutively on the one day? would the air samples still have traces of the previous meats contaminants?
- 2.6 was the VJ operator wearing clean sterile clothing for each debridement?
- 2.7 did the VJ operator have prior experience in operating the VJ and was the debridement correct procedure?
- 2.8 how close was the air sampler to the operator?

The above questions may have been limitations to the research that were not discussed.

Figure 1 in the text refers to the set up of the room, however the actual Figure is not provided. This would provide a clearer understanding of how the room was set up, where the air sampler, settle plates were placed for testing and at what height.

3. The results section has a few statements that describe methodology ie biopsy procedures and process for EM.

4. the description of the findings for the swabs requires was unclear to me, it did not seem correct.

5. there are several interesting findings that have not been discussed or some explanation provided ie Table 2: meat 2 shows presence of SA; Table 3 shows an increase in bacteria count in settle plate front right from 45 at 1m to 106 at 2m and 0 at 3m, why would there be such a discrepancy?

5. The results and Figure 6 and introduce the "removal of dressing" yet this was not mentioned in the methodology.

There are a few minor revisions required such as:

6. the titles of a few of the figures and tables could be more descriptive to get a better understanding of what they represent.

7. there are a few minor spelling mistakes

8. interchangeable terminology ie biopsy and curretage

Finally the article could benefit from more discussion on interpreting the results and the implications to clinical practice.

Overall, a innovative pilot project that would benefit from further vigorous research

Level of interest: An article of importance in its field

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests