Reviewer’s report

Title: Enzymatic Debridement for the Treatment of Severely Burned Upper Extremities - Early Single Center Experiences

Version: 0 Date: 15 Apr 2016

Reviewer: Winston Richards

Reviewer’s report:

Thank you for submitting your work. I have several questions and comments that may not be applicable in your geographic area, but I hope that they stimulate conversation and possibly even initiate other research.

1. The number of patients in the series is somewhat small. Are you able to collect a historical control group in your institution for comparison?

2. The number of patients left at the end for follow up is also limited (8/16) severely hampering your ability to comment on outcomes.

3. The DASH questionnaire has been in use for many years. Did it help to discern any differences in the patients that were seen in follow-up? Did it highlight the patients that complained of skin tears with minor trauma?

4. How would you use dermal substitutes or collagen matrices such as Integra/Matriderm or Primatrix in your management of burn patients treated with ED?

5. Have you had the opportunity to use ReCell(spray on epithelial cells) in your practice? How would you incorporate this approach in the ED management of hand burns?

6. Where do silver dressings fit in your management of second degree burns?

7. Have you considered the use of allograft or xenograft to cover the wounds after the application of ED?


9. You mention that there were several patients that had evidence for deeper wounds and that they underwent further debridement prior to SOC. Does this suggest that the ED was not complete in removing their burned tissue?
10. Do you use a Weck knife or Humby knife in your necrosectomy? Do you have other debridement modalities available such as the Versajet (High pressure water debridement.) or Misonix (High frequency vibration debridement) which may remove thinner layers of necrotic/burned tissue than the standard knives?

11. In the background section I noticed that you stated that the SOC is often associated with poor functional or aesthetic outcomes. Would it be more precise to say that third degree burns or deep burns are associated with poor functional and cosmetic outcomes in spite of the SOC?


13. Are you able to comment on invasive wound infection or cellulitis in the patients treated with ED?

14. Did the need for further debridement in patients with deep burn wounds noted after ED suggest progression of the burn injury of incomplete debridement of the wound by the enzyme agent?

15. Time to application of the ED agent was on average 24 hours. Did this time change for those patients with circumferential wounds or wounds that were of concern for treatment with escharotomy? Did this 24 hour time to application have any effect on the length of time that the tissue might have been under stress from high compartment pressures? Was ED used in lieu of escharotomy on these burn patients?

Thank you again for submitting your work. I hope that these questions are of interest to you. I am looking forward to your reply.

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.

No

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.
Unable to assess

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

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I am currently involved in a randomized prospective sponsored clinical trial involving Nexobrid/MediWound in the United States. The contract is with the University of Florida my employer. I do not directly receive reimbursements or fees for participation in the project. At this time the study has not started and I have not used the product. Thank you.

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