Peer Review File

Article information: http://dx.doi.org/10.21037/atm-20-288

Reviewer A

This event was a catastrophe and there is much to learn from the experience. The amount of people sustaining full thickness injuries to 50% and 90% TBSA and inhalation injury is absolutely incredible. There is much research focusing on the very young and very old. As mortality is very good in youth, data is sparse, but the degree of injury in this report is of significance.

Consider a grammatical revision of title. Perhaps: "Clinical features and mortality-related factors of extensive burns among young adults: The Kunshan disaster experience "

Author response:

Thank you for your important suggestion. We have modified the title as requested.

Please proofread the manuscript for grammatical errors. Below are three found in the abstract. For time purposes, I did not include all the found errors in this peer-review, however the body of the manuscript seemed to have less.

Pg 2, Line 9: "associated with"

Pg 2, Line 11: "who were admitted

Pg 2, Line 16: Change "There were 71.3% of patients had" to "Seventy-one percent of patients had"

Pg 2, Line 18: Consider changing indexes to scores

Author response:

Thank you for your important suggestion. We have modified the title as requested.

The authors should be commended for including residual burn surface area at 28 days, as this is often not considered. Now one must perform a similar analysis to identify the factors best contributing to why the delay occurred (ie. Surgeon availability, sepsis, co-morbidities, etc) RBSA at 28 days should be added to future investigation needs in the discussion.

Pg7, Line 81: Please include how TBSA was measured/estimated. (Lund and Browder, Rule of Nines, etc).

Author response:

Thank you for your important suggestion. We have modified the text.

Pg 7, Line 83-84): Consider revising the subscore description, as it appears to "run-on" and is a bit confusing.

Author response:
Thank you for your important suggestion. We have modified the text.

The authors should be commended for the comprehensive and appropriate statistical analysis design. Additionally, the paragraph was well-written.

Pg.8, Line 108: I recommend adding exactly which variables were tested for mortality (See below for an additional comment)

Author response:
Thank you for your important suggestion. We have modified the text.
Pg 9, Line 121: I would recommend reporting revised Baux score, instead of Baux.

Author response:
Thank you for your important suggestion. We have modified the text and Table 1.

Pg 9, Lines 128-130: Some clarity is needed. Circulatory failure was likely not really the cause, but resulted from your next point. Perhaps circulatory failure as a result of sepsis (72.6%), hemorrhagic shock etc…

Author response:
Thank you for your important suggestion. We have modified the text.

Pg 10, line 132: Change 150 to One hundred fifty.

Author response:
Thank you for your important suggestion. We have modified the text.

Pg 10, line 145: It would be good state volume received in each group. The supplemental material was not provided to me, so I am not sure if it is there.

Author response:
Thank you for your important suggestion. We have checked for the volume for resuscitation. However, we don't have enough data to provide in the manuscript.

Pg 10, lines 150-156: More clarity may be needed. It would be best to understand which variables were analyzed. You report >50% TBSA was strong, but were any others? Which variables were tested? The readers need to know what may or may not have been included in the analysis. Maybe something is missing? Or clarity may help future researchers by saving them time avoiding unneeded repeated analysis.
Was 20% TBSA tested or just not enough in the cohort under 20%? The authors mention this in limitations, but I believe more limitations can be listed.

Author response:
Thank you for your important suggestion. However, there were only five patients with < 50%TBSA, so it is difficult to analyze the other factors. We have add them in the limitations.

Additionally, how have the authors controlled for known variables that impact survival in burn patients? Were the factors in Table 3 the only components of the regression? Was inhalation injury tested? Many questions remain and added clarity may help.

Pg 11, Line 154: I enjoy the approach of ROC for the 28 day RBSA. It was a thoughtful way to present an often overlooked yet impactful variable.

Related, and displayed in Table 2, the authors should emphasize time to first autograft. There is also some discussion around early excision and grafting, but it is much more impactful to clearly say, "At least get the first graft placed." There is a limited early window between resuscitation and the point these large burns patients get really sick. Is there a benefit of accepting a 75% graft take and significantly reducing remaining open wounds until a new window appears?

Author response:

Thank you for your important suggestion. We have modified the text.

Pg 12, Line 174: Unavailability of donors is a good point and inclusion needed.
Pg13, lines 193-197: Clarity is needed. The authors state large volumes were utilized, which included large amounts of albumin and FFP. The next line says small volumes were given. Secondly, why was risk transmitted infections the main deterent within 8 hours? It wasn't increased vascular permeability?

Author response:

Thank you for your important suggestion. We have modified the text.

Pg 14, Line 201-210: I agree. Why wasn't early nutrition and insufficient daily caloric intake part of the survival analysis?

Author response:

Thank you for your important suggestion. We agree that nutrition therapy is considered an important treatment of burn patients. In another study by our group, we found that mortality at 28 d was 11% and in-hospital mortality was 45 %. Multiple regression analysis demonstrated that EN providing <30% energy and septic shock were independent risk factors for 28- d prognosis. (British Journal of Nutrition 2019, 121, 974–981.)

Pg 14, Line 222: Thank you for mentioning underlying comorbidities.
Pg 15, conclusions: The authors can bolster this paragraph more. What do you want to readers to take away from this study? Adding more direct language could help drive the point home. Get rid of the dead tissue and cover these grafts.

Author response:

Thank you for your important suggestion. We have modified the conclusion.

Reviewer B

The authors provide a good review about the treatment of massive burns. These results are quite good. They have found that larger burns have a higher mortality than smaller burns, which is consistent with other studies.

Author response:

Thank you for your important suggestion.