31394-ANSWERING REVIEWERS

Re: Review of the Initial Treatment and Avoidance of Scald Injuries

We thank the reviewers for their time and careful consideration of the paper. We have responded to the comments and we have updated the manuscript accordingly. We hope this manuscript is now suitable for publication.

Reviewer 1.

Good idea as far as prevention of scalds is concerned. However I think the authors should concentrate on the measures to prevent scalds and avoid the scientific and practical aspects of burn management and leave that to specialized burns personnel. The rule of nines for surface area is no longer used by most of the burn centers.

We thank the reviewer for this comment and have given it careful consideration. In multiple locations in the paper we've emphasized the importance of burn avoidance. In particular, the paper deals with temperatures of beverages which are likely to cause severe burns. With respect to the rule of nines, both the American Burn Association and the European Practice Guidelines for Burn Care still cite this method. It is commonly used in practice by emergency medicine services and emergency medical providers. We agree with the reviewer that there are multiple methods which have been studied to assess total body surface burn area. It is beyond the scope of this paper to present a survey or summary of those methods. Fluid resuscitation estimations and TBSA burned maybe calculated differently in a burn unit, but in the prehospital and emergency department setting the rule of nines is commonly used and again is endorsed by the American Burn Association and the European Practice Guidelines for Burn Care.

Reviewer 2.

a. **Please discuss the prehospital care in detail, such as cooling time.**

We have changed the title to represent the initial nature of these injuries. The scope of this paper was twofold. First, to describe the importance of temperature and time on burn depths and second to provide a brief overview of commonly used treatment modalities. We have rewritten the text in certain areas to include discusses on cooling. The reviewer makes a good point that cooling time can reduce temperatures within the skin. Prior work has shown that while the majority of burn injury occurs during the application of heat, a significant part occurs during cooling. Faster cooling, consequently, leads to lower injury. The calculations were carried out to encompass cooling until the tissue temperature was below that which would cause injury. We've modified the text to make this more clear.

b. **The modified parkland formula should be added into the text.**

Regarding other formulas to estimate fluid resuscitation there are many in addition to the Modified Parkland Formula and that is why we choose include the wording, "Multiple formulas exist for estimating intravenous fluid needs in the first 24 to 48 hours after a burn. The Parkland Formula is one of the most popular."