Author's response to reviews

Title: Convective burn from use of hairdryer for heel warming prior to the heel prick test - a case report

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Version: 3 Date: 17 March 2011

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17 March 2011

BMC Paediatrics

Dear Editor

**Convective burn from use of hairdryer for heel warming prior to the heel prick test – a case report**

**MS: 9696823495139588**

Can I thank all three reviewers for their very helpful and constructive comments. A number of minor revisions have been suggested and each will be discussed in turn below:

**Reviewer 1**

1. The reviewer asked us to clarify if the gel is an anaesthetic gel. A reference has been added to the makers of the gel heel warmers. This link provides more detail of how the gel works but we have added a sentence in paragraph 3 of the discussion that clarifies that the heated gel is within the heel warmer and it is activated by manipulation of a trigger disc.

2. The reviewer has asked the authors to suggest the most appropriate procedure for CBS. We have added to the final paragraph in the discussion a reference to the most up-to-date research based guidelines for CBS.

3. The reviewer wished more information regarding the use of the hairdryer. The information that was available to the authors has been added to the first paragraph of the Case Presentation Section. Here we have added
that the hairdryer was used for approximately 1 minute and held at 6 inches from the baby's foot.

4. We have also clarified in paragraph 1 of the Case Presentation section that it was an hour after the procedure that the mother noticed the injury to the child.

5. The reviewer commends us on our interesting and dramatic case report and describes this article of importance in its field. We have strengthened this argument more by adding to the background section that this method of CBS is offered to all infants born in the United Kingdom and have stressed the importance of this test in terms of metabolic screening. We have added to the 5th paragraph on the discussion the need for these rare but potentially serious conditions to be detected early.

Reviewer 2

1. This reviewer suggested that we consider a number of web sources that he kindly included. Unfortunately the relevance of some of these was not clear to the authors. The first reference discusses arterial blood gas sampling compared to capillary blood gas sampling for oxygenation and acid base status. The authors do not agree that referring to this would add anything to this case study. The second reference provides a 2 page discussion from the New Zealand National Screening Unit on CBS guidelines that describes the literature pertaining to heel warming and pain relief. We have added a sentence to the second paragraph in the discussion that highlights recommendations to either breastfeed or provide a dose of sucrose to comfort the infant during testing.

2. The main message of the paper has been strengthened and includes all points raised by the reviewer. We have clarified in the 5th paragraph of the discussion that further research is clearly needed to not only assess the usefulness of heel warming in infants where the heel is cold but also the most effective way to do this.

Reviewer 3

1. The reviewer suggests that the two photos do not add to the message of this case study. The authors are in agreement that picture 2 (which was taken 3 weeks post-injury) can be removed but we feel strongly that the first photo taken on admission to hospital clearly and dramatically demonstrates the injury caused to the infants foot by the heat of the
hairdryer. We have therefore removed the reference to the second photo but not the first. We are however happy to take the editors advice here.

2. A sentence has been added to the background section that explains why every infant born in the UK has CBS offered.

3. A sentence has been added to Paragraph 1 of the discussion to describe literature search and keywords.

4. We have added to the second paragraph of the discussion 2 new references which discuss the analgesic properties of both breastfeeding and sucrose.

5. Reference 6 has been removed and a more appropriate reference added to illustrate that 1. Heel lancing is the most commonly performed invasive and painful procedure in newborns and 2. The importance of testing for rare but serious conditions which if treated early can dramatically improve outcome.

6. Reference to rubbing of the heel has been removed.

Can I thank all reviewers again for their positive comments and suggestions to further improve this paper. I hope you agree that we have addressed all the issues raised. Please do contact me if there are any further points of clarification needed.

Yours sincerely

Dr Ashley Shepherd