Epidemiology of paediatric burn injuries, and Kandang Kerbau Women's and Children's Hospital's (KKH) experience with Mepilex® Ag

Hui Ling Foo[1], Savitha Ramachandran[2], Gale Lim Jue Shuang[3], Yong Chen Por [4]
*Family names/surnames are underlined
1 Cleft and Craniofacial Centre, Kandang Kerbau Women's and Children's Hospital (KKH), 100 Bukit Timah Road, Level 5, Women's Tower, Singapore 229899, A0069409@u.nus.edu
2 Cleft and Craniofacial Centre, Kandang Kerbau Women's and Children's Hospital (KKH), 100 Bukit Timah Road, Level 5, Women's Tower, Singapore 229899, savitha.ramachandran@kkh.com.sg
3 Cleft and Craniofacial Centre, Kandang Kerbau Women's and Children's Hospital (KKH), 100 Bukit Timah Road, Level 5, Women's Tower, Singapore 229899, gale.lim.js@kkh.com.sg
4 Cleft and Craniofacial Centre, Kandang Kerbau Women's and Children's Hospital (KKH), 100 Bukit Timah Road, Level 5, Women's Tower, Singapore 229899, por.yong.chen@kkh.com.sg

Burn injuries are among the top five most common unintentional child injuries[1]. Our study aims to obtain epidemiological data of burns patients treated at KKH and share our experience in the treatment of partial thickness burns.

A retrospective epidemiological study was performed on 1000 paediatric burn patients treated at KKH between 2010 and 2013. 753 patients were included in the analysis of epidemiological characteristics and 510 patients were included in the analysis of treatment outcomes for partial thickness burns.

Epidemiological analysis revealed the highest incidence for burn injuries to be amongst 1 year olds. Children 3 years and below accounted for 65.9% of injuries. Partial thickness accounted for 91.6% of all burn depths. 83.8% of burns were due to scalding. 5.0% patients required surgical intervention. 1 mortality was recorded. Analysis of treatment outcomes revealed similar results with the use of Mepilex® Ag as compared to other similar foam dressings (*p-value*= 0.531) amongst partial thickness burns. 4 patients had sensitivity reactions to Mepilex® Ag in the form of rashes or erythema. Addition of DuoDERM® Sterile Hydroactive® Paste to partial thickness wounds yielded similar results to those without it (*p-value*= 0.4282). The Applied Wound Management scale is a helpful tool in ensuring detailed and consistent documentation of the healing wound.

In conclusion, further trials need to be carried out, as an ideal dressing regime for the treatment of partial thickness burns have yet to be discovered. We advocate the use of The Applied Wound Management scale[2] to improve standards of burn care.

Key Words

Paediatric burns
Epidemiology
Mepilex® Ag
DuoDERM® Sterile Hydroactive® Paste
Applied Wound Management Scale

Nominated Stream for Oral Presentations

[√] Medical
[ ] Nursing
[ ] Allied Health
[ ] Scientific

Nominated Stream for Poster Presentations

[√] Care
[ ] Prevention
[ ] Research

[1] Margie Peden KO, Joan Ozanne-Smith AAH, Christine Branche AFR, Bartolomeos FRaK. World report on child injury prevention. World Health Organisation; 2008.
[2] Applied Wound Management. United Kingdom: Wounds International; 2009.