



EPIDEMIOLOGY OF PAEDIATRIC HAND BURN INJURIES: THE EXPERIENCE OF A TERTIARY BURNS CENTRE FROM 2013-2017

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INTRODUCTION + METHODS

Hand burn injuries are common in children, and provide a unique management challenge for multidisciplinary teams, in both short-term wound management and long-term functional outcomes. Most publications regarding hand burns focus on specific mechanisms of injury, and do not demonstrate the group as a whole, or their true burden to a burns centre.

We utilised the Queensland Paediatric Burns Registry, a prospectively collected database, to retrospectively identify patients that received management for a burn injury involving one or both hands at The Pegg Ledischke Children's Burns Centre over a four-year period.

ADDITIONAL FINDINGS

The median age was 24 months of age (IQR 14-55 months) and the median TBSA was 1% (IQR 0.5-1%). 96% (n=1380) of children had a TBSA <5%.

54 children (3.7%) required at least one procedure under a general anaesthetic, as part of their management (includes debridement, escharotomies, dressing changes and grafts).

Beware of:

- ✓ The treadmill! 69% (n=54) of friction burns were caused by treadmills. Friction burns had the highest graft rate of any mechanism (n=14, 19.7%), and constituted 36% of all grafts.
- ✓ The kitchen! The most common place to acquire a contact burn. Oven doors and hot plates were responsible for 353 (37.5%) of contact injuries.



61%



39%

1458

children (34%) were managed for a burn involving the hand(s), from a total of 4328.

92%

were isolated hand burns (n=1325).

12-24 months was the most commonly injured age group overall (n=449, 31%).

39

children required a skin graft (2.7%).

CONTACT

Most likely of any mechanism to be superficial or SPT (78.5%)



65%

SCALD

70% of injuries were in children <3 years of age



21%

FRICTION

Most likely of any mechanism to be DPT or full thickness (76%)



5.3%

FLAME

80% of injuries were in children >3 years of age



4.9%