



Clinical epidemiological analysis of burns in the elderly

Dr Jason Diab¹, Ms Rebecca Lebler¹, Dr Andrea Issler-Fisher¹, Ms Christine Parker¹, Prof Peter Kennedy¹, Prof Peter Haertsch¹, Dr Justine O’Hara¹, Professor Peter Maitz¹

1. Concord Burns Unit, Concord Hospital, NSW, Australia. jdmisciali@gmail.com [Concord Research Travel Scholar]

INTRODUCTION

Burn injury in the elderly is a largely preventable harm that occurs at the home.

A retrospective audit was conducted at Concord Burns Unit from June 2016 to June 2019 at the Concord Repatriation General Hospital. The study group included all adult patients over the age of 65 years whom were admitted to the unit.

The aim of this study is to provide an understanding of the clinical characteristics of elderly patients whom presented with burns. The secondary objective is to provide educational awareness about holistic care for nursing, medical and patient education to this cohort.

The alarming results

There were 143 patients aged over 65 years whom were admitted to the Concord Burns unit with 60.8% men.

- Average age was 76.5 years (+/- 8.52 years) with a median TBSA of 3.00% [0.25 – 45%].
- The most common season affected was winter (36.4%).
- The most common mechanism of injury was scald (52.4%), followed by flame (31.5%) with the lower limbs being most affected (37.8%).
- The site of burn most affected was the lower limb (37.8%), followed by multiple regions (37.1%).
- There was inadequate first aid amongst all patients (54.5%).
- 82.5% of patients had minor burns less than 10%.
- 98.6% of patients resided at home where the injuries occurred. 88.1% returned back to home, the remaining either went to rehab (9.1%) or placed in a nursing home (2.1%).
- 67.8% received regular dressings for their treatment. The remaining were operated on with 25.5% Xenograft (Biobrane) application, and the 5.6% had a STSG and flap.
- There is a mean statistical difference amongst men and women for mechanism of injury ($t=-2.721$, $p=0.007$), age ($t=-2.949$, $p=0.004$), seasons ($t=2.701$, $p=0.008$), and discharge destination ($t=-2.261$, $p=0.025$).

Injuries in the elderly are commonly due to flames or scalding from hot liquids. Burns in the elderly often occur at home, as opposed to younger age demographics where they are a result of activity away from the household.

The difference between sex and injury is statistically significant and shows the difference between activities men and women undertake resulting in burns. This is further compounded by a lack of first aid knowledge in both groups that can lead to further unnecessary complications, procedures, and longer hospital stay [1].

The majority of the patients attend outpatient settings. Outpatient education on how to check water temperature before usage is important, as spilled hot liquids is a significant aetiology of burns in this population. Nursing education and educational awareness with allied health in home adjustments is a key preventative factor.

REFERENCES

- 1 Ho WS, Ying SY, Chan HH. A study of burn injuries in the elderly in a regional burn centre. Burns 2001;27(4):382-5.

