

# MANAGEMENT OF A PATIENT WITH A SUPERFICIAL BURN TO THE CHEST

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Superficial burns are painful for patients and pose particular challenges for healthcare practitioners. The outer layer of skin, the epidermis, and perhaps some of the dermis have been injured, exposing sensitive nerve endings (Laterjet, 2002).

This means that the first key element of managing superficial burns is pain management, followed by wound management.

Pain management may be difficult as there may be pain caused firstly by the burn injury itself, with additional pain coming from subsequent dressing changes (European Wound Management Association [EWMA], 2004). Consequently, good patient care will involve pain assessment and management to ensure that the patient is kept as comfortable as possible.

## Case report

Ms C was admitted to hospital with a history of falls. During her latest she had spilt a hot cup of tea onto her chest, which resulted in a superficial, partial-dermal thickness burn (*Figure 1*).

On initial admission to the ward Ms C was comfortable as she had received analgesia in the A&E



*Figure 1. Superficial, partial-dermal thickness burn to the patient's chest*

department before her admission. The medical staff proceeded with investigations to determine the cause of Ms C's falls history. It was discovered that she was dehydrated and as a result had postural hypotension —

consequently, when she moved around at home she had dizzy spells which would often result in a fall.

The nursing staff were primarily concerned with the treatment

of her burn injury and the associated pain.

### Pain

Pain assessment is crucial to determine the degree of pain the patient is experiencing (Schofield, 2008). Without an assessment it is impossible to determine whether pain management strategies are being successful.

It is also vital to re-assess pain at regular intervals. This is usually done when observations such as blood pressure and temperature are recorded. Pain is regarded as the fifth vital sign because if it is unmanaged, the patient can suffer physically, physiologically and psychologically.

Ms C was asked to grade her pain from 0–10, with 0 meaning she was experiencing no pain at all and 10 signifying the worst pain she could imagine. Initially, Ms C marked her pain at 6 and was given regular analgesia. Thereafter, when her pain score was recorded, it ranged between 2 and 4. At dressing changes, Ms C was given analgesia as required to ensure she did not suffer any discomfort.

### Wound dressings

Due to their nature, superficial partial-dermal thickness burns heal very quickly. This is because the lower layer of the dermis, the reticular dermis, remains intact and so epithelial cells can spread quickly upwards along the sides of hair follicles and sweat and sebaceous glands to regenerate the skin.

Fortunately, Ms C's burn did not cover a wide area, however,

due to being on her chest wall, this made the choice of dressing particularly difficult.

Mepitel® (Mölnlycke Health Care) soft silicone dressing is non-adherent and does not interfere with regeneration of the skin, or cause trauma to the wound bed or discomfort on removal.

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The application of Mepitel meant that Ms C's wound would require infrequent dressing changes, which would help to lessen any discomfort.

A secondary dressing was required to absorb any exudate that may have passed through the Mepitel and Versiva® XC® (ConvaTec) was chosen for its absorbent properties and the fact that it can be left *in situ* for several days — again resulting in infrequent dressing changes.

### Nutrition

As always when a patient is admitted to a care setting, a nutritional assessment should be performed. It was important to identify any nutritional deficits that might have had a bearing on Ms C's history of falls and on her burn wound healing.

A MUST (Malnutrition Universal Screening Tool) (British Association for Parenteral and Enteral Nutrition [BAPN], 2003) assessment was performed, which identified that Ms C was

at risk as she had experienced unplanned weight loss over a period of several weeks — her clothes had become loose and she reported her wedding ring sliding from her finger. Ms C was given a high calorie, high protein diet to ensure she received sufficient energy to work with physiotherapists in her rehabilitation and was receiving the necessary nutritional input for optimum wound healing.

### Outcome

Ms C's superficial burn injury fully healed after three weeks. Once fully hydrated, she became more alert and responsive and was considered safe to return home. **WE**

British Association for Parenteral and Enteral Nutrition (2003) *The MUST Report; Nutritional Screening of Adults a Multi-disciplinary Responsibility*. Available at: [http://www.bapen.org.uk/pdfs/must/must\\_exec\\_sum.pdf](http://www.bapen.org.uk/pdfs/must/must_exec_sum.pdf) (accessed 22 May, 2010)

European Wound Management Association (2004) *Position Document; Pain at Wound Dressing Changes*. MEP Ltd, London

Latarjet J (2002) The management of pain associated with dressings changes in patients with burns. *World Wide Wounds*. Available at: <http://www.worldwidewounds.com/2002/november/Latarjet/Burn-Pain-At-Dressing-Changes.html> (accessed 22 May, 2010)

Schofield P (2008) Introducing guidance for the assessment of pain in older adults. *J Comm Nurs* **22(12)**: 4–8