

# MANAGEMENT OF A CAVITY PRESSURE ULCER THROUGH PRESSURE RELIEF AND NUTRITION

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Pressure ulcers are localised areas of tissue damage created by excess shear, friction, or pressure (European Pressure Ulcer Advisory Panel, 1999). They are a serious health issue that affect patients in numerous ways. Many patients not only experience pain, malodour, and exudate from their ulcer(s) but they can also suffer a reduction in quality of life (Fox, 2002). Pressure ulcers are also a massive financial burden on the NHS, at an estimated cost of £1.4–2.1 million annually (Bennett et al, 2004).

## THE PATIENT

An 82-year-old woman was admitted to an acute hospital setting from home. She had been living alone since the death of her husband two years before. She had no close relatives and relied on her neighbour for assistance. She was living on one cooked meal a day that her neighbour provided and biscuits that she kept by her bed. Her mobility had been so diminished that she only left her bed to visit her bathroom twice a day.

## PATIENT ASSESSMENT

The patient was referred to the tissue viability service on



*Figure 1. Tracking of the wound margin.*

admission due to a large grade four sacral pressure ulcer. The wound measured 6.5cm by 8cm and 4cm in depth. The cavity extended to the underlying tissue and undermined at one margin by 4cm, with slough present at the medial and distal margin. The remaining wound margin was red and oedematous. There were no clinical signs of wound infection. The surrounding skin was fragile and there was evidence of skin damage to the local area. There was a slight smell and a moderate level of exudate. The patient was also experiencing a high level of pain from the wound site.

The admitting nurses had completed pressure ulcer and

nutrition risk assessments and local wound care assessment documentation, revealing that her nutritional state was poor, her mobility was almost completely diminished and she had been experiencing stress incontinence. All of these factors had contributed to the development of her sacral pressure ulcer, from which she now felt increasing pain. This comprehensive

assessment led to the development of a good care plan that aimed to encompass all of her treatment and care needs.

## TREATMENT/ MANAGEMENT

The first objective was to relieve the patient's pain as this has a significant impact on quality of life and also affects wound healing (Hollinworth, 2005). A doctor prescribed regular analgesia, and then referred her to the pain nurse specialist. Initially tramadol and paracetamol were given, and following assessment by the pain team, regular oramorph was prescribed. Once comfortable she could then tolerate the assessment and subsequent dressing of her wound. She was now also able to comfortably rest at a 30-degree tilt to reduce contact pressures (Colin et al,

1996), however, not completely on her side. This relieved the pressure from her sacral area, without causing undue pressure at the trochanters (hips) by lateral positioning. An appropriate low-air-loss mattress had already been provided which would also assist in the reduction of the risk of further pressure damage by providing a continuous low-pressure support. Physiotherapist expertise was also sought and the patient was shown exercises to do while in bed, to further encourage self-positioning.

To reverse her poor nutritional intake and risk of malnutrition, it was necessary to provide a high protein diet, offer supplementary drinks and keep a diary of intake by using documented food charts. It was important to remember that wounds place a high metabolic demand on patients and therefore it is vital they receive adequate calories to redress any imbalance (Shepherd, 2003).

The treatment regimen for the wound consisted of lightly filling the cavity with Aquacel (ConvaTec, Ickenham); a hydrofibre dressing which absorbs and contains exudate from the wound, preventing maceration of the surrounding skin. The dressing also encourages the removal of slough to provide a clean base for granulating tissue, while leaving no residual fibres in the wound.

The secondary dressing of choice was Versiva® (ConvaTec, Ickenham) which was chosen because the patient already had macerated and fragile surrounding skin and experienced pain on dressing removal. The



*Figure 2. End stage of dressing choice.*

dressing is also waterproof which provides a bacterial barrier and reduces the risk of cross infection. The dressing regimen was discussed with the patient and nursing staff. Initially the wound was given fresh dressings every other day. This then became every third, then fourth day as clinically indicated by diminishing exudates levels.

### OUTCOME

Within the first two weeks there was a noticeable improvement and the non-viable tissue within the cavity was gone, leaving in its place a 90% granulating wound bed. The surrounding skin had also improved with less visible maceration. By the third week, re-epithelialisation was evident and the wound was contracting.

### CONCLUSION

Appropriate referral was made to the tissue viability service on the patient's arrival to the ward. While the initial referral was for wound care advice, it was necessary to consider many other factors impacting on her life. This required making a full holistic assessment and developing an adequate care plan to guide appropriate interventions. Accurate assessment is crucial to wound management to ensure that vulnerable patients are not

put at risk and resources are not wasted (Moore, 2005). It is this process that must guide referral to other members of the multidisciplinary team in a timely manner. It is also this expert guidance from different disciplines and interdisciplinary working that will ultimately aid wound healing.

Without dietary advice and good nutrition, wound healing is delayed, if not unachievable. The patient will not be comfortable and a good quality of life is not possible without prompt referral to the pain services. Adequate pressure relief cannot be achieved without repositioning, using appropriate pressure-relieving equipment and consulting with a physiotherapist. But most importantly none can be achieved without accurate assessment and good old fundamental nursing care. **WE**

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