

MANAGING A HEAVILY EXUDING, LARGE PRESSURE ULCER

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Pressure ulcers can develop in any area of the body depending on the causal factors. Pressure ulcers commonly occur at the site of bony prominences such as heels, ischial tuberosities, the sacrum, shoulder, ears and occiput. Large pressure ulcers can produce large volumes of exudate and if they are not managed appropriately the skin surrounding the ulcer can become macerated. Leakage of exudate can cause misery for the patient due to soiled clothing and a loss of dignity.

Pressure ulcers also represent a massive financial burden to the NHS, with the cost of treating a grade 1, non-blanching erythema being £1,064 escalating to £10,551 for the treatment of a grade 4 ulcer extending to bone, tendon or joint (European Pressure Ulcer Advisory Panel [EPUAP], 2001). The total cost to the NHS of treating pressure ulcers is estimated at £1.4–2.1bn per year (Bennett et al, 2004). Consequently, it is important that clinical performance and the cost-effectiveness of wound dressings are considered. The dressing must be a reasonable price with good fluid-handling capability, so as to reduce the number of dressing changes.

PATIENT DETAILS

The patient was a 72-year



Figure 1. At presentation the pressure ulcer was filled with necrotic subcutaneous tissue.

old woman who had suffered a cerebral vascular accident

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(CVA) and was found at her home unconscious. She was wedged against furniture and consequently had an extensive area of skin necrosis on the anterolateral aspect of her right thigh — an unusual site for skin damage.

She was referred to the tissue viability service and

a comprehensive wound assessment was performed, including size, site, tissue present, odour and the condition of the surrounding skin. The pressure ulcer measured about 28x13cm and was filled with necrotic subcutaneous tissue (Figure 1). It was heavily exuding and needed daily dressing changes using Aquacel® Hydrofiber® dressing (ConvaTec) and covered with Versiva XC® gelling foam dressing (ConvaTec). These highly absorbent dressings were chosen because of the high volume of exudate. They successfully prevented the patient's skin from becoming macerated but still required changing daily.

One week later the patient's pressure ulcer began to appear cleaner (*Figure 2*). The full depth of the ulcer was revealed as the necrotic tissue was gradually debrided by autolytic debridement. This is the process whereby the exudate that is produced by the wound rehydrates necrotic tissue, enabling it to be lifted away at each dressing change with the old dressings. The depth of the wound was 3.5cm once all the necrotic tissue had been removed.

At two weeks the pressure ulcer was considerably cleaner and granulation tissue was also evident (*Figure 3*), however there was still some stubborn necrotic fascia exposed which required conservative sharp debridement by a tissue viability nurse (*Figure 4*). Conservative sharp debridement should only be performed by a competent and knowledgeable practitioner. Despite high levels of exudate, the patient's skin remained healthy with no sign of maceration.

Once the wound bed was clean, the Aquacel® and Versiva XC® dressings were replaced by topical negative pressure (TNP) wound therapy to encourage the growth of granulation tissue and wound contraction. This was applied using the Chariker-Jeter method (Chariker et al, 1989) of inserting a wound drain within Kerlix® gauze (Covidien) into the wound bed. This is then sealed using film dressings and the drain attached to the Exsudex™ wound drainage pump (The Wound Care Company UK Ltd, Manchester) (*Figure 5*).

After two weeks the patient's



Figure 2. After one week the cavity measured 3.5cm.



Figure 3. Granulation tissue begins to appear, but necrotic fascia still remains.

wound bed was considerably cleaner and it had filled with granulation tissue and contracted in size (*Figure 6*). At this stage the patient was discharged to a nursing home. This meant the TNP had to be discontinued as she was moving out of the area to be in a home that was closer to her brother.

CONCLUSION

Wounds may require more than one approach to treatment. Initially, the patient required application of the absorbent dressings Aquacel® and Versiva XC®. However, once the wound was clean the treatment could be changed to TNP. Both treatments ensured that the patient's wound remained clean and in a good condition. **WE**

Bennett G, Dealey C, Posnett J (2004) The cost of pressure ulcers in the UK. *Age Ageing* 33(3): 230–5

Chariker ME, Jeter KF, Tittle TE, Bottsford JE (1989) Effective management of incisional and cutaneous fistulae with closed suction wound drainage. *Contemp Surg* 34: 59–63

European Pressure Ulcer Advisory Panel (2004) *The EPUAP Guide to Pressure Ulcer Grading*. EPUAP, Oxford



Figure 4. Post sharp debridement, the pressure ulcer bed is now 90% clean.



Figure 5. Chariker-Jeter method of topical negative pressure wound therapy.



Figure 6. Wound bed cleaner and contracting.