

THE CORRECT CHOICE OF DRESSING IN PRESSURE ULCERS AND TRAUMATIC WOUNDS

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Deciding on the correct dressing for any wound can be crucial in the patient achieving optimum healing and an improved quality of life. This is especially true in modern wound care as the range of available products is constantly being developed and updated. This article examines a range of wound types and the kind of dressings that may be appropriate.

Before deciding on which dressing to apply, it is important to first assess the patient's wound and the surrounding skin. No matter which wound assessment tool is used, the same criteria for assessment will be included:

- ▶▶ Exudate level
- ▶▶ Type of tissue present within the wound bed
- ▶▶ Condition of the surrounding skin
- ▶▶ Site of wound,
- ▶▶ Size of the wound
- ▶▶ Cause of the wound.

The Nursing and Midwifery Council (NMC, 2008) is very clear that it is every nurse's responsibility to ensure that clear and thorough documentation is recorded in order to enhance communication between colleagues and decide whether the wound is progressing towards healing.

Heel pressure ulcer

Wound aetiology

Figure 1 shows a pressure ulcer

on a patient's heel. A blister has formed and has spontaneously derroofed (burst). Under the blister there is an area of superficial, partial dermal ulceration. This wound is likely to heal quickly as the skin will regenerate spontaneously.

The wound site

As the wound is on the patient's heel, it is likely to benefit from a heel-shaped dressing or a dressing that can at least be shaped to the heel.

The skin

This is the limb of an elderly patient and the skin is very dry and fragile. The state of the patient's skin should be taken into consideration when selecting a dressing. In this case, if the dressing has an adhesive border, this may affect the skin on removal of the dressing.

Wound tissue

This wound contains clean, dermal tissue.

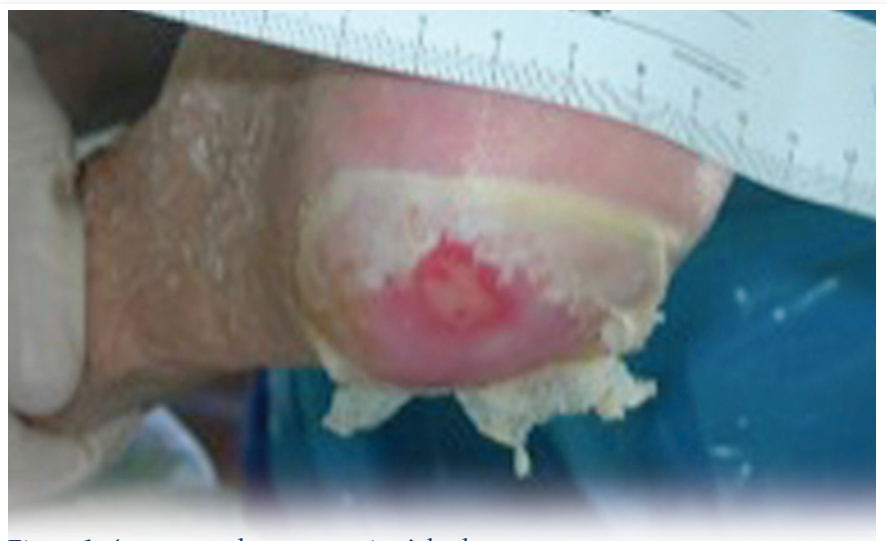


Figure 1. A pressure ulcer on a patient's heel.

Wound exudate

The wound is producing a small amount of clean exudate. This is partly because the wound is small; partly because of the type of wound tissue that is exposed. Dermal tissue does not produce a lot of exudate in a small wound area.

Is clinical infection present?

The wound tissue is clean and there is no inflammation (redness) around the pressure ulcer. No pus or bleeding is present and the patient does not have an elevated temperature. Therefore, the wound is not infected.

Appropriate dressings

Appropriate dressings include:

- ▶▶ A simple heel-shaped foam dressing, which could be left in place for 5–7 days
- ▶▶ A heel-shaped hydrocolloid dressing, which could be left in place 5–7 days
- ▶▶ A non-adherent, silicone-coated dressing, light padding and light bandage. May need replacing every 3–5 days.

Trauma wound

Wound aetiology

Figure 2 shows a traumatic injury that has been severe enough to destroy both skin and tissue.

The skin

This patient's skin appears healthy, although it does not appear well cared for. It is vital to ensure that the whole limb is treated, not just the wound area. This limb requires washing, thorough drying and the application of a light emollient to gently remove the visible scale.

Wound tissue

The presence of hard, dry and necrotic tissue means that the



Figure 2. Trauma injury, demonstrating the presence of necrotic tissue.



Figure 3. Sacral pressure ulcer showing signs of exudate leaking onto the patient's surrounding skin.

tissue has died due to lack of blood supply.

Wound exudate

The tissue is necrotic and there is no exudate as the tissue has desiccated (dried out).

Is clinical infection present?

Although there is necrotic tissue present in the wound, this does not necessarily mean the wound is infected. There is no inflammation or pus and the patient is not pyrexial (feverish).

Appropriate dressings

- ▶▶ A thin layer of hydrogel dressing, covered by a hydrocolloid dressing
- ▶▶ A hydrogel sheet dressing.

Pressure ulcer

Wound aetiology

Figure 3 shows a pressure ulcer, which the patient sustained at home after collapsing. He was found unconscious, having lain on the floor for at least 24 hours.

Wound site

The pressure ulcer is situated in the sacral area, to the right of the natal cleft.

The skin

The patient's skin appears healthy, although there are signs of exudate spilling onto the surrounding skin. This may indicate that either the dressing is insufficiently absorbent or that it is not being changed promptly when saturated with

exudate. Both must be avoided in order to reduce the risk of maceration (softening of a tissue by soaking).

Wound tissue

The wound bed contains granulation tissue (characterised by a healthy pink/red colour) and has a cobblestoned appearance.

Wound exudate

Granulation tissue (a mass of new connective tissue and capillaries formed on the surface of a healing ulcer or wound) contains a large number of immature new blood vessels, which 'leak' exudate. This wound demonstrates a heavily exuding wound bed.

Is clinical infection present?

Wound exudate has a natural antibacterial effect and this wound is clean, healthy and granulating. There is no inflammation or pus present and the patient is not pyrexial. In view of these signs, it is unlikely that the wound is infected.

Appropriate dressings

- ▶▶ Hydrofiber® (ConvaTec) dressing filler as a primary dressing, with either a Hydrofiber gelling foam

dressing or a foam dressing as a secondary dressing

- ▶▶ Alginate dressing filler as a primary dressing, with either a Hydrofiber gelling foam dressing or a foam dressing as a secondary dressing.

The dressings must be absorbent to cope with the heavy exudate levels and must be changed when saturated with exudate. It is inappropriate to add padding to a dressing, this just adds weight and increases the risk of maceration.

Traumatic wound

Wound aetiology

Figure 4 shows a traumatic wound sustained when the patient, a wheelchair user, fell out of her chair.

Wound site

The wound is situated under the patient's right knee

The skin

The skin is oedematous (swollen) and tight and the patient complained of a throbbing pain at the wound site.

Wound tissue

There is dead and sloughy tissue present, which has presented

the ideal environment for bacteria to grow.

Exudate

The exudate is purulent, thick and collecting under the dead skin/tissue.

Is clinical infection present?

The wound is painful. There is purulent exudate and the area surrounding the wound is inflamed. The patient is also pyrexial. The wound is clinically infected.

Appropriate dressings

The patient ideally requires pain relief and surgical debridement (cleansing of dead and infected tissue).

An antimicrobial dressing to treat the infection within the wound bed should be selected by a wound/tissue viability specialist. Intravenous antibiotics are needed to treat the infection.

Conclusion

In all types of wound, assessing the aetiology, wound position, the presence of pain, the current state of the wound tissue, and the presence of infection, are vital skills that the nurse can employ when deciding upon the correct treatment option. With the number of dressings now available on the market, many of which are designed for specific wound types, it is vital that nurses are able to decide which products to use in order to ensure an optimum healing environment. **WE**



Figure 4. This image demonstrates the presence of purulent exudate (pus) and an area of inflamed tissue surrounding the wound.

NMC (2008) *The Code: standards of conduct, performance and ethics for nurses and midwives*. NMC, London