In each issue of JCN we ask clinical experts to take a look at a therapy area and examine some everyday problems that community nurses may experience. Here, we look at how best to prepare the wound bed for healing...

How can desloughing a wound aid the patient experience?

**THE PROBLEM**

It is widely known that sloughy non-viable tissue in the wound is a barrier to healing and provides an environment for bacteria to flourish (Martin, 2013). Here, Lorraine Grothier, consultant nurse tissue viability/service manager at Provide CIC, explains how removing slough from the wound bed helps to optimise the wound-healing process and is a prerequisite for any successful treatment plan (Dowsett and Newton, 2005).

**THE SOLUTION**

In the first instance it is important to carry out an holistic assessment that determines baseline observations and considers the patient’s overall health and wellbeing. Underlying diseases may exist and will need to be addressed to optimise healing, for example if a wound is located on the lower limb, the aetiology needs to be established and appropriate action taken; in this case vascular assessment, referral and correction of venous hypertension, and the use of compression where indicated.

Similarly, where a diabetic patient has a foot wound this will need careful monitoring and it is important to seek the advice of specialist diabetes and podiatry colleagues. The patient’s opinion must be considered and the available options explained to enable informed decisions that optimise concordance with treatment (Ousey and Cook, 2012).

**ASSessment**

Assessment of the wound should include identifying different tissue types such as viable and non-viable tissue. The percentages of each type should be documented to inform progression or deterioration (Dowsett et al, 2015). It is important that clinicians without the appropriate knowledge seek the opinion of a more experienced practitioner to ensure accurate assessment (Dowsett et al, 2015).

Tissue types present in the wound may include necrosis, slough, granulation and epithelial tissue as well as hypergranulation (Eagle, 2009). Slough can also increase the amount of exudate due to multiplying bacteria and odour caused by necrosis (Trudgian et al, 2014), both of which can be distressing and uncomfortable for patients. Therefore, timely removal of devitalised tissue is essential (Vowden and Vowden, 2011).

Slough’s mixture of white blood cells dead tissue and debris can easily be mistaken for pus (Brown, 2013), and has many different presentations including soft and stringy or fibrous and adherent tissue. The colour of slough varies from yellow, creamy white or grey depending on the cellular matrix and presence of other organisms.

Clinicians are frequently faced with the challenge of choosing an appropriate method of desloughing a wound and will need to consider multiple factors including:

- The anatomical location and size of the wound
- What options/resources are available and what the clinical indications for each method are?
- Which intervention will be the safest and most acceptable to the patient and clinician?
- Which desloughing method is the clinician most competent to administer?

**Preparing the wound to heal**

Preparing the wound bed is an essential element of wound healing (Gray et al, 2011). It remains the responsibility of all clinicians dealing with patients with sloughy wounds to initiate an appropriate care plan. This should consider all the factors identified during the initial assessment, the appearance of the wound on...
presentation and signs from all subsequent assessments.

**HOW TO ACHIEVE A VIABLE WOUND BED?**

Slough within the wound provides the ideal environment for bacteria to multiply and can prolong the inflammatory phase of the healing process (Dowsett and Ayello, 2004). It must be remembered that when dealing with a chronic wound, sloughy tissue often reappears and therefore repeated desloughing interventions may be required (Brown, 2013).

The most common way to remove slough from the wound is through dressing products, particularly in the patient’s home where sharp and surgical debridement are not a safe option. The choice of dressing product is dependent upon a number of factors including:

- Patient comorbidities
- Tissue type and exudate levels
- Size and location of wound
- Condition of periwound and surrounding skin
- Presence of infection
- Patient-reported pain
- Patient’s lifestyle choices
- Resources available, i.e. formulary restrictions.

Dressings useful in the desloughing of wounds include amorphous gels and gel sheets, which have the ability to donate fluid to rehydrate tissue and promote autolysis (destruction of a cell through the action of its own enzymes). However, the amount of hydration needed will depend on the tissue type and the levels of exudate — if there is too much moisture present, maceration can damage the periwound skin (Strohal et al, 2013).

Hydrocolloids also promote autolysis by occluding the wound and creating moisture at the wound surface. They have the ability to absorb variable amounts of exudate depending on the composition of the dressing.

Other dressings used to promote autolysis include fibrous hydrocolloids, honey and iodine. All of these facilitate the body’s natural process, liquefying and separating devitalised tissue from the wound (Vowden and Vowden, 2002). However, patients may be sensitive to the active ingredients and adhesives used in these dressings (Strohal et al, 2013).

A useful alternative are fibre-trapping dressings (e.g. UrgoClean®; UrgoMedical), which have the ability to trap slough and absorb exudate while maintaining the moist wound-healing environment. These dressings can be used by clinicians with varying levels of knowledge and expertise due to their mode of action and the TLC Healing Matrix, which make them easy to apply and remove — they are also gentle on the skin (Trudgian et al, 2014). The dressings’ mechanical mode of action means that the risk of procedural pain and maceration are minimised. Figures 1–3 illustrate wound types which may benefit from this kind of dressing.

**CONCLUSION**

Effective desloughing is reliant on accurate assessment of the patient and the wound. Nurses should also consider the level of exudate, known sensitivities and any other risks which may be detrimental to patient care. Understanding the mode of action and appropriate use of dressing products will minimise the risk and promote a positive patient outcome. JCN

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**REFERENCES**


