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Sharp debridement is an invasive procedure that can result in complications. Jane Preece argues that it should be carried out only by nurses who have been appropriately trained and have had their competence assessed

**KEY WORDS**

Sharp debridement  
Clinical risk  
Procedure

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■ A course on sharp debridement is currently being validated at King's College, London. For further details please contact Jenny Bentley on tel: 0207 848 3530 or [www.kcl.ac.uk/inmvc/external/prospectus/index.html](http://www.kcl.ac.uk/inmvc/external/prospectus/index.html)

# Sharp debridement: the need for training and education

Until recently there has been a lack of courses demonstrating how to undertake sharp debridement. The clinical governance framework has highlighted that nurses frequently perform the procedure without having received formal education and training (Fairbairn et al, 2002). Clinical governance, which includes risk management, clinical audit and evidence-based practice, aims to help all clinicians to improve quality and safeguard standards of care. The framework seeks to ensure that health professionals have the right training, skills and competencies to deliver the care needed by patients.

**What is sharp debridement?** Sharp debridement is used to remove necrotic tissue from a wound bed, and is viewed by many experts as essential to the healing process (Falanga, 2002). Surgeons often debride a wound until they reach bleeding tissue. However, it is suggested that nurses should not do this as there are risks associated with this technique, such as prolonged bleeding (Fairbairn et al, 2002).

A more conservative approach is the removal of dead or foreign material just above the level of viable tissue using scissors or a scalpel (Poston, 1996). This method is considered less hazardous, and therefore safe for a wider range of practitioners to undertake in a variety of settings, following training.

In the UK, sharp debridement is most frequently undertaken by nurses, particularly in the community and in specialist fields such as plastic surgery (Vowden and Vowden, 1999). However, preregistration nurse education courses offer little theory on wound assessment and healing.

In addition many nurses lack the in-depth knowledge of the structure of the skin and wound management that is essential if sharp debridement is to be carried out

**BOX 1. FACTORS AFFECTING WHETHER TO USE SHARP DEBRIDEMENT**

PRACTITIONER	PATIENT
Do you have the necessary skills?	Will the treatment benefit the patient?
Have your skills been assessed?	What does the patient want?
Are you competent?	Has the patient consented to the treatment?
Do you have the appropriate equipment?	Has the patient's medical history been assessed?
Is the environment safe?	Are there any contraindications?
	Is the patient in pain?

**BOX 2. CONTRAINDICATIONS AND CAUTIONS**

CONTRAINDICATIONS	CAUTIONS
Ischaemic digits	Ischaemic lower limbs
Blood-clotting disorders	Long-term anticoagulant therapy - for example, warfarin
Fungating/malignant wound	Short-term anticoagulant therapy - for example, subcutaneous heparin
Wounds that involve or are near the following: ■ Vascular structures ■ Dacron grafts ■ Prosthesis ■ Dialysis fistula	Wounds on heels
Debridement of the foot (excluding heel)	Achilles tendon area
Wounds on the hands and face	

safely. Even tissue viability courses rarely cover the technique in detail. For this reason even nurses who have advanced their knowledge of tissue viability should not undertake sharp debridement without receiving further education.

Sharp debridement is an extended role, and as with any area of practice individual practitioners are responsible for ensuring they are competent before undertaking this task (NMC, 2002). With this comes the need to maintain and gain clinical competence in the new field of practice. This is also highlighted in *Making a Difference* (Department of Health, 1999), which emphasises the need for continuous professional training and lifelong learning. Before an individual nurse can undertake an extended role the employing organisation needs to agree that the role should be undertaken by nurses. Otherwise, in the event of a complication, the organisation does not necessarily have to take overall responsibility for the nurse's actions.

**When should sharp debridement be used?**

Wound debridement allows the extent of tissue damage to be assessed. It also enhances wound healing (Edwards, 2000) as necrotic tissue can be a focus for bacterial proliferation (Falanga, 2002; National Institute for Clinical Excellence, 2001) and infection. However, not all dead tissue needs to be removed - for example, dry eschar on heels (Goode, 1995).

The factors to consider when deciding whether to use sharp debridement, as opposed to other methods such

as autolytic or enzymatic debridement, or larval therapy, are summarised in Box 1. Prior to undertaking sharp debridement, it is important to obtain informed consent from the patient.

**Complications** Complications will be reduced if nurses know the cautions and contraindications for sharp debridement (Box 2). Nurses also need to know what to do if a complication occurs, and this should be clearly stated in any policy or procedure.

In the hospital setting medical assistance is available if complications arise. In the community, however, nurses usually work alone, and it is necessary to have a good risk-management strategy in place.

It is suggested that sharp debridement should only be undertaken when another colleague is present (Fairbairn et al, 2002).

The most frequent complication is bleeding. If bleeding occurs the procedure should be stopped, local pressure applied, and the wound dressed using a haemostatic dressing. The patient should not be left unattended until the bleeding has stopped; if it fails to stop, medical help should be sought. The patient should be visited later that same day.

Pain can occur because of the position of the patient or if viable tissue is pulled or cut. If pain does occur, the procedure should be stopped, the patient should be assessed and analgesia administered.

Damage can also occur to structures under the devitalised tissues, such as tendons and blood vessels. Again, if injury is suspected, the procedure should be stopped, the possibility of injury reported to the doctor and, if possible, a photograph taken.

If a complication occurs, a clinical incident report should be completed according to local policy.

### Education and assessment of competence

The need for education and training prior to undertaking sharp debridement has been acknowledged, yet practitioners also need practical assessment and supervision. In the last decade there has been a move towards competency-based learning. Competency means having the ability or authority to do what is required and accepting accountability for that work (Heywood Jones, 1999).

At King's College Hospital we have developed a competency document, which covers all elements of sharp debridement included in the procedure developed by Fairbairn et al (2002) (see Box 3). However, the problem with using a practical competency-based assessment is finding a relevant 'expert' to be the clinical supervisor. ■

### BOX 3. A PROCEDURE FOR SHARP DEBRIDEMENT OF WOUNDS BY NURSES

As a tissue viability specialist nurse, I have used sharp debridement as a wound management tool for several years without problems. However, clinical governance, designed to improve quality and safeguard standards of care (Crimson, 1999), revealed a need for formalised guidance and training in this procedure in order to reduce clinical risk.

Enquiries undertaken both regionally and nationally found that there was a lack of guidance in other NHS trusts (Fairbairn et al, 2002). It became apparent that there is little training on sharp debridement for nurses – either theoretical or practical.

The knowledge and skills required for sharp debridement appear to be passed down informally, with little control over who carries out the procedure, or with what supervision. This means there is a high potential for error or poor practice, with associated complications.

In view of this, several tissue viability nurses developed a local procedure to address this lack of clear guidance (Fairbairn et al, 2002).

**What does the procedure include?** The procedure provides a step-by-step guide to sharp debridement as well as outlining the responsibilities of the organisation and the individual (NMC, 2002). It identifies other related guidelines or procedures that the nurse should consider before debriding a wound, such as infection control, wound care guidelines and local dressings formularies, as well as the environmental and clinical equipment required. The aim is to identify standards of care and reduce clinical risk, while allowing the procedure to be adapted to meet local needs.

Recommendations for education and competency assessment are included in the procedure. More rigorous recommendations are given for community nurses due to the increased risk associated with undertaking sharp debridement in an environment without immediate medical back-up.

**Future developments** Since its development in May 2002, the procedure has been widely distributed. It seems that this is not just a national issue, but an international one, as we have had enquiries from as far afield as Israel, Saudi Arabia, Australia and New Zealand.

Sharp debridement is a valuable tool in wound management, but it carries higher risks than many other methods of debridement. Individual nurses and organisations need to be aware of their responsibilities and aim to maximise patient benefit while reducing clinical risk (NMC, 2002; Crimson, 1999).

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