

CATEGORY: MECHANICAL DEBRIDEMENT

DEBRISOFT®

MAKING THE CASE

INDICATIONS FOR DEBRISOFT

Debridement is the removal of non-viable tissue from the wound bed and/or surrounding skin and is an essential part of the wound healing process (Ströhal et al, 2013). The Debrisoft monofilament debridement pad (Activa Healthcare) is a sterile, single-use pad for use on adults and children to remove devitalised tissue, debris, and hyperkeratotic skin in or around acute or chronic wounds and affecting the skin more widely. It is made of monofilament polyester fibres, cut with angled tips, with a reverse side of polyacrylate (Figure 1). It can be used in hospital and community clinics and in the patient's own home.

HOW TO USE DEBRISOFT

The Debrisoft pad must first be moistened with water (tap/sterile) or saline. The soft fleecy side can then be used to gently wipe over the surface of the wound using a circular motion. Cellular debris, slough, exudate and hyperkeratotic tissues are trapped within the monofilament fibres and are removed from the wound and skin. One or more new pads are required for each wound, depending on the wound area and level of debridement needed. These can be disposed of in general/household waste. Debrisoft can be used by less-experienced practitioners and by patients or their carers.

CAN IT REPLACE OTHER DEBRIDEMENT METHODS?

Several techniques are used for debridement, depending on the nature of the wound (Ströhal et al, 2013). In the community, the most common methods of debridement used include mechanical (Debrisoft), autolytic and larval therapy.

Autolytic debridement (e.g. using hydrogels) has generally been the method of choice due to its simplicity of use and perceived cost-effectiveness. However, it is often time-consuming and a recent consensus suggests that slower methods may not always be in the best interests of the patient (Price and Young, 2013; Wounds UK, 2013).

Debrisoft provides an effective alternative that is both a simple and immediate option for debridement, which can be used alone or in combination with other methods (e.g. autolytic or sharp) to maintain a healthy wound bed. This may make the process of debridement more universally available in that Debrisoft:

- can be used by the majority of healthcare professionals working in the community — avoiding delays in treatment
- is cost-effective — with a reduction in the need for specialist methods of debridement and associated costs

As such, Debrisoft does not replace all other debridement techniques, but it means that immediate and effective debridement is now available to more patients.

Can Debrisoft overcome common debridement challenges?

- ✓ Is simple to use — can be used by the non-specialist safely
- ✓ Avoids delay in implementing debridement therapy
- ✓ Facilitates early and accurate diagnosis
- ✓ Accelerates wound debridement
- ✓ Is well tolerated by the patient

CLINICAL EVIDENCE FOR DEBRISOFT USE

The NICE medical technology guidance appraised the clinical evidence for Debrisoft. This looked at 15 multiple-patient case-series reports (5 peer-reviewed papers and 10 posters), some of which included retrospective comparators (NICE, 2014). NICE concluded that the clinical evidence demonstrates that Debrisoft is associated with:

- a significant improvement in wound bed condition after 3 debridement sessions compared to hydrogel, gauze or surgical debridement
- faster debridement (one author reporting that autolytic debridement would need to be used 8–10 times to achieve the same results)
- protection of new healthy granulation tissue, which was undisturbed by the debridement process (even when removing crusts)
- an average time of under 3 minutes for each debridement session
- improved visualisation of the wound bed — aiding assessment of pressure ulcer category and clearer identification of wound management objectives
- removal of thin and soft layers of fibrin, which are easier to remove than thick fibrin and necrotic tissue
- no damage to the fragile skin surrounding the wound
- successful removal of lower limb hyperkeratotic skin with improvement in skin condition
- successful debridement of haematoma — in one study in less than 5 minutes
- an overall rating of 'very good' in terms of convenience and ease of use
- a significant reduction in pain immediately after treatment.

In summary, the NICE committee concluded that Debrisoft monofilament debridement pad was likely to completely debride appropriate wounds more quickly than gauze or hydrogel and may give earlier visibility of the wound bed. They considered that Debrisoft was convenient and easy to use, and was well tolerated by patients (NICE, 2014).

COST

The Drug Tariff price for a 10 x 10cm Debrisoft monofilament debridement pad is £6.39 (excluding VAT) (May, 2015). Pads are sold in packs of 5.

Figure 1: Debrisoft key features

- 1 **Monofilament fibres** — 18 million polyester fibres. These are a specific length and density that allows them to loosen necrotic tissue, hyperkeratotic skin, and adherent exudate from the wound and surrounding skin.
- 2 **Soft and flexible pad** — allows for non-traumatic debridement and cleansing with minimal discomfort.
- 3 **Soft fleecy outer layer with polyacrylate backing** — Material testing has demonstrated that the Debrisoft pad does not shed fibres while in contact with the wound bed.



Explanation of how to use this guide: This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.

ESTABLISHING A COST MODEL FOR DEBRISOFT

The NICE guidance has concluded from the evidence available that Debrisoft offers significant time-savings: it is quick to use (2-4 minutes per session) and may lead to faster debridement and healing. Overall, when compared to other methods, this will result in fewer nurse visits, saving on nursing time and a significant cost reduction.

An independent cost model was devised to calculate the potential cost savings for using Debrisoft compared to the use of hydrogel or gauze (most common methods) and bagged larval therapy (used less frequently). This included a number of assumptions for the analysis:

- the time horizon (estimated length of time) was the time to complete debridement of the wound
- all treatments were provided by a district nurse and were based on a wound size of 10x10 cm
- each nurse visit took 22 minutes in a clinic setting and 40 minutes in the home setting
- the number of nurse visits per application depended on the product and its availability
- 1 wound was treated per patient (wound type not specified).

Formal analyses using the cost model demonstrated that Debrisoft remained cost saving in almost all scenarios (NICE, 2014).

ECONOMIC BENEFITS OF USING DEBRISOFT

When compared with hydrogel, gauze and bagged larval therapy, cost savings per patient (per complete debridement) are estimated to be £99, £152 and £484 respectively in a community clinic and £222, £347 and £469 respectively in the home (Figure 2).

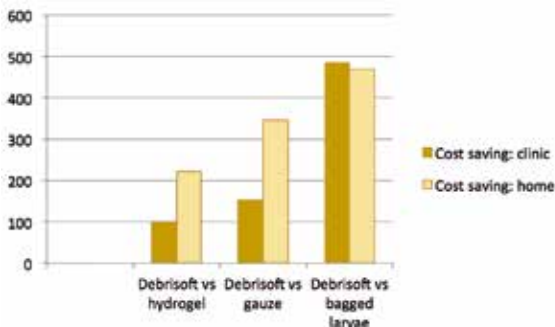


Figure 2: Estimated cost savings when using Debrisoft compared to hydrogel, gauze and bagged larvae.

According to NICE guidance cost calculator, using Debrisoft has the potential to save the NHS over £15m per year.

Q WHAT ECONOMIC BENEFITS HAVE YOU SEEN IN YOUR OWN CLINICAL SETTING?

If you were to explain to a colleague why you have chosen Debrisoft, what would you give as the main economic benefits?

- ✓ More effective debridement, with a reduction in the time to complete debridement
- ✓ Reduces the amount of community care needed and fewer wound care visits
- ✓ Shorter patient waiting times for treatment and fewer referrals to hospital

CLINICAL BENEFITS OF USING DEBRISOFT

Debrisoft has been shown to be effective in the debridement of many different wound types including chronic sloughy wounds. This allows greater visibility of the wound bed and is important in facilitating healing. It may also enable more accurate categorisation of pressure ulcers and, therefore, the ability to provide safer and more appropriate patient care (Dowsett et al, 2013).



Debrisoft can be used as an aid to assessment, facilitating removal of cellular debris and slough in the wound bed and more accurate measurement of depth (Wounds UK, 2014a)

IMPACT OF DEBRISOFT ON PATIENT EXPERIENCE

Empowering patients to self-manage is a growing trend and can reduce reliance on qualified nursing staff. Because Debrisoft has been shown to be easy to use (only limited training needed), suitable patients can be encouraged to take an active role in their care and to undertake debridement of their own hyperkeratosis, dry skin and some chronic wounds (Denyer, 2012).

Patients who are involved in their care often report reduced fear and anxiety associated with their treatment, leading to improved acceptability, confidence and patient concordance (Wounds UK, 2014b). Patient leaflets (available for Debrisoft) are a useful way of reinforcing verbal information and can help to overcome some of the challenges in helping patients to self-manage.

Q WHAT CLINICAL AND PATIENT BENEFITS HAVE YOU SEEN IN YOUR OWN CLINICAL SETTING?

In your experience, what has given you the confidence to use Debrisoft?

- ✓ Wound is fully debrided more quickly
- ✓ Less discomfort for patients compared to other debridement methods
- ✓ Convenient, safe and easy to use (requires little training)
- ✓ Allows the patient to self-manage

References

- Denyer J (2013) The use of debridement pads in the management of children with severe Epidermolysis Bullosa (EB). Poster presentation, EWMA, Madrid
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- National Institute for Health and Care Excellence (NICE) (2014) The Debrisoft monofilament debridement pad for use in acute or chronic wounds. London. Available at: <http://bit.ly/1Q4VE4J>. [All supporting clinical studies can be found within this reference]
- Price B, Young T (2014) Debridement consensus: Recommendations for practice. *Wound Essentials* 8(1): 71-6
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