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# Mepilex XT made easy

## Introduction

**Wound exudate plays a vital role in the healing process, and is a key factor in dressing selection. The composition, as well as volume, of exudate is an important element to consider. High-viscosity exudate is an area that has proved particularly challenging for clinicians (Bond et al, 2015). This Made Easy focuses on how appropriate dressing selection can assist in the management of exudate.**

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## EXUDATE AND WOUND HEALING

It is important to understand the composition of exudate and the role it plays in wound healing to be able to effectively manage it. While generally believed to be a negative factor, exudate plays an important role in the healing process, assisting in maintaining a moist wound bed and supplying electrolytes, nutrients, inflammatory mediators, growth factors and proteases to the wound site. It is only when the amount of exudate produced becomes uncontrolled that problems occur.

Exudate is described in a variety of ways: most commonly in terms of the colour, consistency and amount (WUWHS, 2008; Romanelli et al, 2010). Each of these factors may help to indicate the cause of the exudate and also impact on how the exudate is managed (see Table 1).

Selecting the appropriate dressing to manage the volume and type of wound exudate is vital. The key objectives to consider in dressing selection are to optimise the wound environment, protect the surrounding skin, and maximise the patient's quality of life by controlling pain, odour and leakage (Bond et al, 2015).

## VISCOUS EXUDATE: THE CHALLENGES

The most common factors leading to high-viscosity exudate are infection or inflammation (both of which will result in an increased level of protein in the exudate) and the presence of liquefying necrotic material (Wounds UK, 2013).

All types of exudate have the potential to leak from the dressing, if exudate volume is high enough. However, there is an increased chance of leaking with high-viscosity exudate — even when the volume is low. The thickness (viscosity) of the exudate may result in an inability to pass through the pores that form the surface contact of the dressing, into the more absorbent core materials. This can result in fluid being trapped between the dressing and the patient's skin, leading to maceration from the moisture and excoriation from the high protease content of the exudate. This has been found to be particularly challenging for clinicians; a recent survey by *Wounds International* highlighted the issues faced by clinicians in managing viscous exudate (see Figure 1; Bond et al, 2015).
For the patient, exudate can become the cause of social isolation, as

**Table 1. Significance of types of exudate (adapted from WUWHS, 2007; Wounds UK, 2013)**

| Type | Consistency | Colour | Significance |
|---|---|---|---|
| Serous | Thin, watery | Clear, amber | Often considered normal, but increased volume may indicate infection |
| Fibrinous | Thin, watery | Cloudy | May indicate presence of fibrin strands |
| Serosanguinous | Thin, slightly thicker than water | Clear, pink | Presence of red blood cells indicates capillary damage (e.g. post surgery or traumatic dressing removal) |
| Sanguineous | Thin, watery | Reddish | Low protein content due to venous or congestive cardiac disease, malnutrition<br>Other causes include urinary, lymphatic or joint space fistula |
| Seropurulent | Viscous, sticky | Yellow or tan, cloudy | Bacterial infection<br>Presence of liquefying necrotic tissue or material from enteric or urinary fistula |
| Purulent | Viscous, sticky | Opaque, milky, yellow or brown, sometimes green | Presence of white cells, bacteria, slough or material from enteric or urinary fistula<br>Bacterial infection |
| Haemopurulent | Viscous | Reddish, milky | Established infection<br>May contain neutrophils, dying bacteria, inflammatory cells, blood leakage due to damaged dermal capillaries, some bacteria |
| Haemorrhagic | Viscous | Dark red | Bacterial infection<br>Capillary damage indicative of trauma |

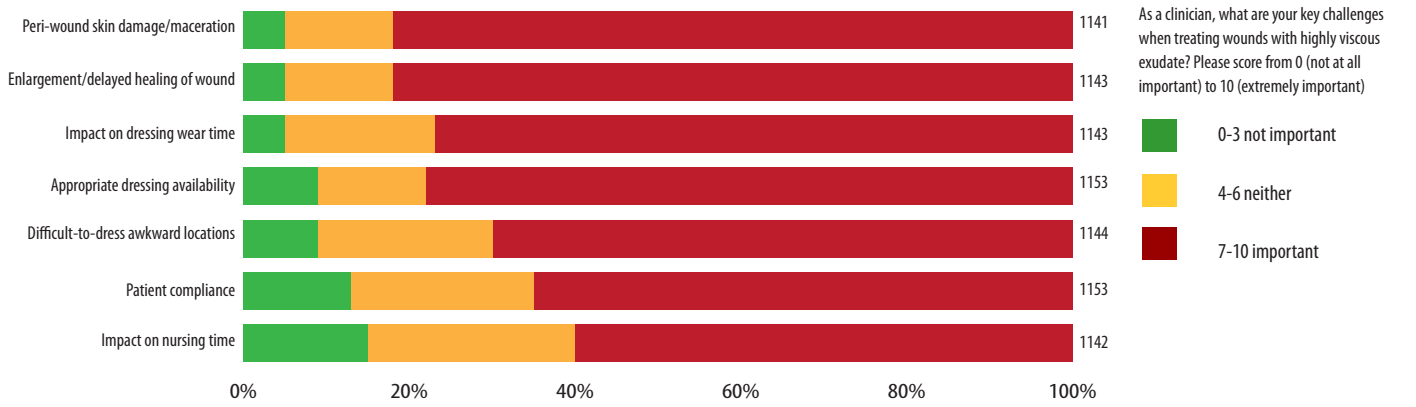


Figure 1. Key challenges for the clinician in managing viscous exudate (Bond et al, 2015)

a leaking and malodourous wound could be a cause of considerable embarrassment and anxiety. Where the exudate is absorbed into the dressing, it can become cold and heavy and pull away from the skin, causing considerable discomfort. The 'bagging' away from the skin also increases the likelihood of the exudate sitting in a pool between the skin and the dressing, increasing the chances of skin damage and leakage from the dependant edge of the dressing. These issues can also have an impact on the patient's concordance with a dressing regimen, which could in turn result in increased time to healing and additional resource usage (Romanellli et al, 2010; Wounds UK, 2013).

## HOW TO MANAGE VISCOUS EXUDATE

### Assessment

When assessing exudate, it is important to look at the dressing as well as the wound, as this will give an indication of where problems may be occurring with management. For example, if the dressing does not appear to be fully loaded with exudate prior to removal but on removal there is a large quantity of exudate on the wound and/or surface of the dressing, this would indicate that the exudate may be too viscous and is not able to pass into the dressing, or alternatively that the intimate contact with the wound has been lost and there is pooling of exudate on the wound bed.

Assessment should always include the patient's perspective, asking if the dressing is comfortable and whether the patient feels pulling on the skin can be helpful in selecting the correct product and determining an appropriate frequency of dressing change.

### Choosing a dressing

When selecting a dressing, ensure that the dressing has an appropriate fluid management capacity (fluid management includes both absorption and moisture vapour transmission or breathability).

**Box 1: The impact of exudate**

Managing exudate is frequently cited as one of the main objectives when caring for patients with wounds; this is because of the impact it has on:

- The patient — leakage or strike-through may be unsightly and malodorous, and stick to clothing or bedding
- The wound and surrounding skin, which can become over-hydrated and excoriated
- The healthcare system — wet wounds frequently require more dressing changes and therefore costs increase of both wound care products and nurse time.

To minimise the risk of leakage (and complications such as maceration) a dressing that absorbs fluid in a different way, or has a different pore size, should be used; if this is not possible, the dressing should be changed more frequently. If using adhesive dressings, care must be taken to protect the periwound skin, as frequent removal of adhesive may result in skin trauma. The use of a product with a silicone adhesive should be considered and/or the use of medical adhesive removers in order to avoid associated skin damage.

Consider the thickness of the exudate and the ability of the contact layer and core of the dressing to handle that viscosity. If an adhesive product is required and frequent dressing changes will occur, consider whether a silicone-based adhesive would be more appropriate.

Choose an appropriate size and shaped product for the wound. Do not 'go up a size' to allow for more absorption; this can result in lack of contact between the dressing and the wound, and also may result in a very heavy dressing that pulls and causes damage to the surrounding skin.

When applying the dressing, consider the effect of gravity: while most manufacturers recommend that the wound is central to the dressing, it is worthwhile considering a greater margin at the lowest edge of a wound, as more fluid will drain downwards than up.

Ensure that you know how the dressing absorbs — there is significant difference between product groups (e.g. foams, superabsorbers, gelling fibre).

## WHAT IS MEPILEX XT?

A recent global survey of 1,475 clinicians noted that only 1 in 10 of the respondents saw their current foam dressing as fully effective in the management of high-viscosity exudate, but despite this, foam dressings were the second most commonly chosen dressing for this wound type (Bond et al, 2015). Mepilex XT has been designed to bridge the gap between the popularity of foam dressings and effectiveness, by providing fast absorption of all types of exudate regardless of viscosity (see Figure 2).

Mepilex XT has been designed to manage both low and high-viscous exudate. The construction of the dressing incorporates exudate channels to aid the absorption of thicker exudate and fluid handling. Exudate is rapidly transferred into the absorbent foam pad and retained in the dressing, drawing it away from the wound bed (Mepilex XT product information).


Figure 2. Anatomy of Mepilex XT

Mepilex XT, like other Mepilex dressings, is a conformable foam dressing that also contains Safetac technology, which adheres only to dry skin (not the moist wound bed), and thus reduces pain on dressing change and reduces trauma to the wound when removed (White and Morris, 2009).

### When is Mepilex XT indicated?

Mepilex XT is designed for a wide range of acute and chronic wounds with low to moderate levels of exudate in all healing phases (see Figure 3). This includes wounds such as pressure ulcers, traumatic wounds, leg ulcers and foot ulcers (Wounds UK, 2015). Mepilex XT is suited to wounds in all healing phases and can manage all types of wound exudate regardless of viscosity.

Mepilex XT can be used under compression bandaging, can be cut to size, can be lifted and adjusted without losing its ability to adhere to the skin and is non-sensitising.

Mepilex XT is not recommended for necrotic tissue and local protocols should be followed for the management of this type of wound (Mepilex XT product information). It is not suitable for wounds where exudate is not present.

## PRACTICAL TIPS FOR APPLICATION OF MEPILEX XT

Prior to application, cleanse the wound in accordance with local protocols. Dry the surrounding skin thoroughly (Wounds UK, 2015).

**Box 2: High-viscosity exudate and dressing choice**

Key points that should be considered when selecting a dressing for a wound with high-viscosity exudate:

- The dressing has the ability to contain all of the exudate
- That the exudate is effectively retained within the dressing
- There is no leakage onto the surrounding skin, increasing the risk of maceration and/or excoriation
- That the dressing does not cause trauma or tissue damage on dressing change
- That the dressing/dressing change should not cause pain
- That the dressing is conformable
- That the dressing is cost-effective

For best results, ensure when applying Mepilex XT that it overlaps the surrounding skin by at least 1–2cm in smaller wounds, and by approximately 5cm in larger wounds. This will reduce the risk of excoriation and maceration to the surrounding skin (Wounds UK, 2015).

Mepilex XT can be cut without affecting its properties. This can be a very effective way of dressing wounds across joints such as the elbow, extremities such as the ear or digits, or within creases such as the axilla, to ensure that the dressing conforms to the wound (Fletcher, 2007). Although Mepilex XT can be cut, it must not be stretched, as this could affect the dressing's absorptive properties (Mepilex XT product information).

Mepilex XT has Safetac technology to keep it gently in place, but to help ensure the dressing stays secure, the use of a bandage or other fixation may be required (Wounds UK, 2015).

### How frequently should dressings be changed?

Mepilex XT can be left in place for several days depending on the condition of the wound and volume of exudate to be absorbed by the dressing (Mepilex XT product information).

It is important to ensure wound assessment at each dressing change (WUWHS, 2007), including an assessment of exudate levels, exudate consistency, colour and odour to check the appropriateness of the dressing (Wounds UK, 2013). It is also vital to perform assessment for evidence of infection, periwound damage, loss of skin integrity, and/or an increase in the wound's size or depth (Wounds UK, 2013). Regular assessment at dressing changes allows for the identification of emerging problems (Romanelli et al, 2010).

The regularity of dressing changes is individual to each case and is dependent on a number of factors. Wounds that are at risk of sudden deterioration such as diabetic foot ulcers require regular inspection and assessment (Wounds International, 2013). More frequent dressing changes and assessment should also be considered if there is an increase in exudate levels, pain and/or increased odour to the wound (WUWHS, 2007).

### When to stop Mepilex XT

Clinicians should consider discontinuing Mepilex XT if the dressing does not manage exudate levels, causes skin irritation, if there is evidence of maceration, or if wound deterioration is observed (WUWHS, 2007). If there is evidence of wound

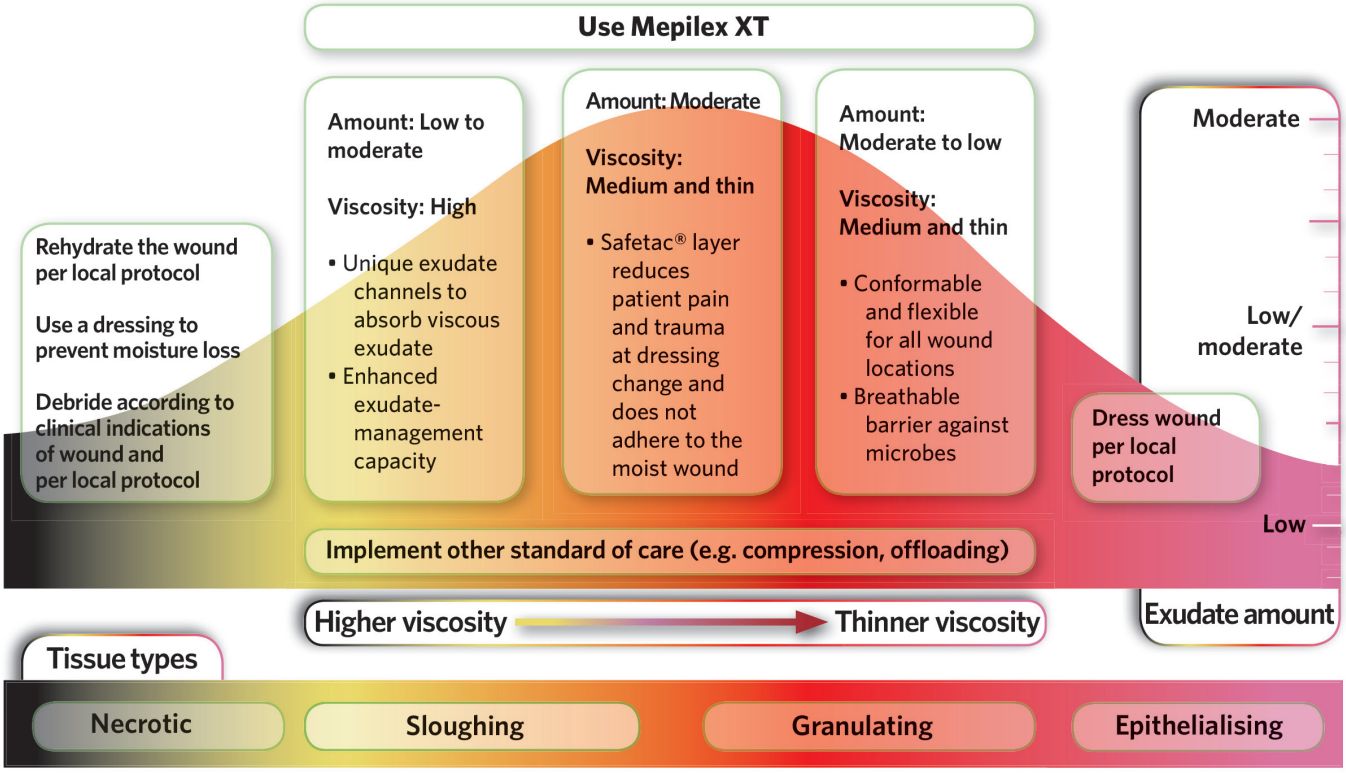


Figure 3. Using Mepilex XT in practice

infection, an alternative dressing choice may be considered appropriate.

If there is delayed wound healing, an assessment should be made to consider whether the current dressing is the most appropriate and to consider underlying causes for delayed healing (WUWHS, 2007).

Patient preference is of great importance and dressing choices should be made with patient agreement (White, 2008).

**Box 3: Benefits of using Mepilex XT**

- Able to manage both low and high-viscosity exudate
- Absorbs all types of exudate, minimising risk of maceration
- Can be used in all exuding wound healing stages
- Minimises pain and trauma at dressing changes
- Promotes patient comfort
- Well suited for use under compression bandages
- Can remain in place for several days depending on the condition of the wound
- Can be cut to suit various wound shapes and difficult-to-dress locations
- Stays in place, allowing for 'hands-free' application of compression or retention bandages
- Can be lifted and adjusted without losing its adherent properties
- Non-sensitising

This Made Easy has been supported by Mölnlycke Health Care. For further information, visit www.molnlycke.co.uk

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