

Use of a sheet hydrogel dressing to overcome common wound problems

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Introduction

Understanding the underlying aetiology of a wound is necessary for the provision of holistic care. Often wound care is secondary to the healing process, as systemic causes of the wound require to be corrected to bring about conditions where healing can take place. Examples of the aims of treatment are:

- Venous ulceration – treatment of venous hypertension.
- Arterial ulceration – improvement in arterial blood flow.
- Vasculitis – control of inflammatory process.

Wound assessment is a cycle of treating the underlying cause, addressing the patient's issues, and diagnosing the wound.

Common wound problems identified

- **Initial wound pain, pain at dressing change and between dressings**
- **Maceration** of surrounding skin
- Presence of **slough** and **necrotic tissue**

Pain – Hofman et al (1997) and Briggs et al (2004) find that unresolved pain has a negative effect on wound healing. Briggs et al (2004) state that dressing related pain is managed more effectively by a combination of:

- Accurate assessment
- Suitable dressing choice
- Skilled wound management
- Individualized analgesic regimes

Maceration – Whilst moist wound healing is considered to be an ideal medium, and exudate can enhance autolysis of necrotic tissue (Cutting and Tong, 2003), excess fluid can cause damage to the surrounding skin.(Young 2000)



Maceration from excess exudate



ActiFormCool in situ. All exudate is locked into gel, preventing damage to surrounding skin.

Necrotic tissue and slough – Presence of this tissue will act as a barrier to wound healing and requires to be removed. (Falanga 2000) Method of debridement will depend on:

- Aetiology of wound
- Location of wound
- Extent and type of tissue involved
- Amount of exudate

This poster presentation will describe in case study form, how use of a sheet hydrogel dressing overcame problems in wound care, addressed pain and prepared the wounds for further intervention or healing.

Case study 1

74 year old lady.
Recurrence of venous leg ulcer. She has poor tolerance of dressings, due to pain. Experiencing strike through of exudate on to bandage, necessitating twice weekly change of compression bandaging. (see photos below)



Case study 1 - Exudate damage to surrounding skin.



Case study 1 (1 week later) - Surrounding skin healthy with no maceration. Compression bandage in place for one week, and no strike through noted.

Case study 2

75 year old lady.
Venous ulceration. Copious wound exudate causing distress to the lady and family. Strike through noted on outer layer of multi layer bandage.



Case study 2



Case study 2 (8 weeks later) - having change of compression bandage and ActiFormCool™ every 5days, with no strike-through on to bandage and wound clean and healing well.

Case study 3

84 year old lady.
Post angioplasty. Wound increasing in size, and slough difficult to remove.



Case study 3 - Pre ActiFormCool™.



Case study 3 (3 weeks later) ActiFormCool™ has removed slough and granulation tissue is evident.

Case study 4

83 years old lady.
Painful leg ulcer.
Unable to tolerate multi layer elastic bandage.



Case study 4



Case study 4 - six weeks of twice weekly treatment with ActiFormCool™, and Actico short stretch bandage.



When ActiFormCool™ was discontinued slough re-appeared in the wound



ActiFormCool resumed and healing progressed

Discussion

ActiFormCool™ has proven to be a most useful dressing when presented with challenging wounds including use under compression. It has the ability to absorb high levels of exudate without damaging surrounding skin. Throughout the process of debridement, granulation appears to be taking place at the wound bed, resulting in a clean, more superficial wound. The wound will either go on to healing, continuing with ActiFormCool™ or simple non-adherent, or it may be judged appropriate to utilise interventions such as grafting or MMP inhibitors.

The patients report that this is a comfortable dressing throughout wear time, and non-traumatic on removal. The dressing appears to relieve initial wound pain and throughout the wound healing process.

References

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