

A Case Study Evaluation of a Soft Silicone Primary Wound Contact Dressing in the Prevention of Wound Pain and Tissue Trauma

AUTHORS: Marconi R, Laverda F, Trevisan G. Department of Dermatology and Venereology, Trieste University, Trieste, Italy

INTRODUCTION

In recent years, an increasingly important requirement of wound management has been the prevention of pain and additional tissue trauma, especially at dressing change. Unfortunately, many dressings can give rise to trauma and pain, as a result of them adhering to wounds as exudate dries and dressing adhesives 'sticking' too aggressively to the peri-wound skin.^{1,2} In recognition of this, the European Wound Management Association's Position Document³ and the World Union of Wound Healing Societies' Consensus Documents^{4,5} provide clinical guidance on how to assess and minimise pain during dressing-related procedures.

An ideal dressing for a fragile wound should have a long 'wear time' (as this will minimise the number of dressing changes) and be atraumatic on removal, in order to protect the healing wound and surrounding skin from further trauma. Mepitel® (Mölnlycke, Gothenburg, Sweden) is a primary wound contact dressing with Safetac® adhesive technology. This patented, soft silicone technology confers upon the dressing the ability to adhere to intact dry skin but not to a moist wound bed, thereby permitting atraumatic and pain-free removal.⁶ Mepitel can be left in situ for extended periods (up to 14 days, depending on the nature and condition of the wound) as an interface layer between the wound bed and a secondary absorbent dressing, allowing the secondary dressing to be changed as often as required, so minimising disturbance to the wound bed.^{7,8}

AIM

A case study evaluation, involving two patients, was undertaken to evaluate Mepitel as a primary wound contact dressing.

METHOD

Mepitel was used to cover the donor site of an auto-transplantation skin graft (Patient 1) and to secure skin grafts in a patient with pyoderma gangrenosum (Patient 2). The following parameters were measured: wound size; condition of the wound bed / peri-wound skin; nature / level of exudate; and wound pain.

RESULTS

Patient 1: It was possible to leave Mepitel in place for up to 14 days, allowing the secondary dressing to be changed as frequently as required, thus avoiding disturbance of the wound bed. The donor site was observed to heal quickly. The soft silicone wound contact dressing was associated with atraumatic and pain-free application and removal.

Patient 2: Mepitel was effective in holding the skin grafts in position and remained in situ until the grafts had been established.

Details of the cases are summarised in the table and the positive outcomes shown in the photographs below.

CONCLUSION/DISCUSSION

These findings demonstrate that Mepitel is an effective dressing for use in the treatment of skin grafts.

They also provide further evidence of the ability of this type of dressing to promote healing, and to be removed without causing tissue trauma and pain to patients.

Patient no.	Wound type	Number of wounds	Wound location	Wound area (cm x cm)	Wound bed	Exudation	Peri-wound skin	Pain
1	Donor site	1	Right thigh	12 x 5	Bleeding	Normal	Healthy	None
2	Pyoderma gangrenosum	Multiple	Left leg	3 x 2	Mixture of slough/ fibrin/ granulation tissue	High	Eczematous	None

Patient 1



Baseline (day 1): Mepitel applied after skin graft

Mepitel removed after 14 days

Patient 2



Surgical treatment

Baseline (day 1): Mepitel applied after surgical treatment

Completely healed after 14 days

Baseline (day 1): Mepitel applied after surgical treatment

Completely healed after 14 days