Report on Silflex®

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Introduction

Skin tears are traumatic wounds that result from a separation of the 2 major layers of human skin, the epidermis and the dermis and superficial wounds are those that have the first layer of skin removed through trauma or through surgical removal as a donor site. During the ageing process the layers of the skin start to atrophy; the epidermis becomes thin and fragile, and dermal thickness decreases by 20 percent (Whiteetal, 1994) placing the elderly at increased risk of skin tears and traumatic wounds.

The optimal management for these superficial wounds are to prevent their occurrence in the first place. However, once they have occurred, treatment can then be quite painful as nerves are exposed. The epidermis does not have its own supply of blood and relies on the dermis for oxygen and nourishment delivery and waste removal to the Stratum basale of the epidermis. The wounds are also often difficult to heal, particularly when the epidermal 'roof' of the skin tear needs to be reunited with the dermis in order to survive.

There is evidence that treating the wound by (where possible) returning the skin flap to the original position and allowing the two surfaces to reunite and heal, is best practice. The old methods of treatment were to:

- *Remove the roof of the tear. This increases the healing time as the dermis then has to grow a new 'roof'.*
- *Unite with steri-strips. This can be successful although the steri-strips often fall away when the skin tear begins to ooze fluid. They also adhere to the secondary dressing and can be torn away when the secondary dressing is removed.*
- *Apply adhesive dressings. These dressings tended to stick to the 'roof' section of the skin and would often remove the roof with the dressing when it required changing.*
- *Suture. This needs to be undertaken by someone trained in technique, can cause further trauma and pain and is not available to general nursing homes etc.*

Silicone dressings have been regularly used for the purpose of uniting the two skin layers. The silicone ensures there is no further trauma and the dressing can be left in situ for the length of required healing time, ensuring that the two layers remain firmly together. The holes in the silicone permits the passage of fluid into the secondary dressing which can be changed without disturbing the silicone layer below.

Although superficial traumatic wounds do not have a 'roof' to adhere to the dermis, they are difficult to treat as the nerve ends are exposed in the dermis, making any dressing change a painful experience. A silicone dressing applied in such an instance would ensure dressing change would be a simple painless procedure as only the secondary dressing requires changing.

Advancis Medical produce a silicone dressing (Silflex®) that is perfect for both of these problems. The Eastbourne Wound Healing Centre was asked to evaluate Silflex® in the treatment of skin tears and superficial wounds.

Aims

The main aim of this evaluation was to evaluate the treatment of superficial wounds and skin tears if left without removing Silflex®.

Methods

- *Five patients took part in the evaluation. Each patient was provided with a full explanation of the procedure and gave written consent to taking part.*
- *Photographs were taken at each dressing change*
- *The Silflex® was left in situ for 14 days and, therefore, the photographs show the Silflex® in situ at each dressing change.*
- *There was a mixture of skin tears and superficial wounds. One was a skin donor site wound that had been non-healing for two months.*
- *If steri-strips were already in situ, they were not removed to prevent further trauma.*
- *The secondary dressing was selected by the specialist nurse who made the decision based on the need dictated by the wound which was absorbency, retention of the dressing or comfort under compression.*

Results

CD. Skin tear. Steri-strips in situ over skin flap. Silflex® left in situ for 19 days.

E.B. Superficial wound of 3 month duration. Silflex® left in situ for 14 days.

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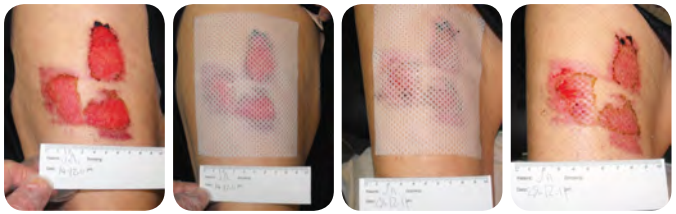
SB. Skin tear. Silflex® left in situ for 18 days.

VB. Small superficial wound. Healed in 10 days. Silflex® left in situ until closure occurred.

Mrs JA. Donor site of three months duration. Non healing as the soft fragile new skin was removed at each dressing change. The wound healed rapidly when Silflex® was applied.



Discussion

Silflex® is gentle on the skin and was painless on removal in each case. None of these wounds grew into the holes of the Silflex® even when it was left in situ for up to 19 days. Application of a secondary dressing was simple and the type of secondary dressing was selected according to the individual patient requirements. If the patient wished to shower, the selection was Tegaderm Foam. If absorbency was important, Eclypse® was selected. In each case, the Silflex® was left in situ throughout. There was no identified problems when the Silflex® was in place. The wounds were all pain free and healing occurred in each case. In the skin tears, the 'roof' remained stable and successfully united with the dermis.

Conclusion

Superficial wounds pose problems that are different to chronic and deep wounds. The goal in caring for a patient with a superficial wound is to reduce the pain level and to reduce the potential of further damage to fragile skin.

Measures of clinical efficacy are relatively objective measures of physiologic endpoints that may not necessarily reflect outcomes that are important to patients. What is important to the patient is to be comfortable with treatment and to be able to continue with activities of daily life free from trauma and pain.

The main aim of this evaluation was to evaluate the treatment of superficial wounds and skin tears if left without removing the Silflex® and the outcomes demonstrated that Silflex® is highly successful for treating skin tears and superficial wounds. The pain levels are reduced on removal of the dressing as the Silflex® can remain on the wound, ensuring that the secondary dressing change does not cause further trauma to the tissues. Each wound showed very positive signs of healing when the dressing was removed and there were no negative issues identified with not removing the dressing for up to 19 days.

References

White, M.W., Karam, S.,Cowell, B. Skin tears in frail elders: a practical approach to prevention. Geriatr Nurs 1994; 15: 2, 95-99.

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