

# **The Use of Transparent Film Island Dressings for the Treatment of Skin Tears on Elderly, Ambulatory Adults**

**A Case Study**

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**Wound Clinic**

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## Overview

Skin tears are a common, everyday occurrence in the elderly. Aging causes the skin structure to change. Rete pegs that once firmly anchored the epidermis to the dermis begin to shrink. Without these fingerlike projections, the epidermis can slide over the dermis. As a result, external friction and shear may easily remove the epidermis from the dermis creating a skin tear.

Although skin tears are common, there is no common method to treat them. Often products are used that aggressively adhere to the wound and the surrounding skin. Removing these dressings can cause further damage to the epidermis and disrupt the wound bed and the healing process. An ideal dressing for skin tears would be convenient and comfortable, not aggressively stick to the wound bed or surrounding skin, provide an effective barrier, maintain moisture levels for optimal healing while being visually acceptable to the patient and providers.

Moisture vapor permeable films are known to be excellent physiological substitutes for an epidermal roof over exposed dermis. However, the healing fluid that collects under the film may be aesthetically displeasing to the health care provider and the patient. This problem can be alleviated by using an island dressing of transparent film with a nonadherent pad. This protocol is used in treatment for all community dwelling outpatients with skin tears who present to the Wound Clinic.

## Case Histories

### Case Study 1

An 88-year-old female was treated at our Wound Clinic for six different skin tears within 64 days. Although she lived by herself, drove a car and was quite self-sufficient, the slightest bump broke the skin. Her medical history included reactive lung disease, atrial fibrillation, and hypertension. Her medications included warfarin sodium (Coumadin®). She was allergic to penicillin and cephalosporins, making wound infections a problem to treat. The standard protocol in this clinic for treating skin tears includes the use of 3M™ Tegaderm™ +Pad Transparent Dressing with Absorbent Pad. Results of this treatment for a skin tear she received when she walked into the corner of her oven door are noted in Figures 1a–h.

### Case Study 2

A 73-year-old female was being treated at the Wound Clinic for a non-healing ulcer on her right medial malleolus when she presented with a new, severe skin tear on the dorsum of her left foot (Figure 2a). Five days earlier, she had fallen and her foot slid under a door. Emergency Department treatment included cleansing with hydrogen peroxide, applying triple antibiotic ointment and the application of 3M™ Steri-Strip™ Adhesive Skin Closures. Past medical history was significant for treatment with radiation therapy which resulted in damage to central and peripheral nerves, facial scarring and loss of eight digits from both hands, leaving only her thumbs. She was allergic to penicillin, aspirin, mercury, and iodine and sensitive to numerous skin products. She owned her home, lived by herself, functioned independently, and oil painted for a hobby. The clinic wound protocol was initiated on day five of the injury. Because of transportation difficulties, a home health agency was asked to follow her care. Wound care supplies were sent home with her until the agency could obtain its own supply.

## Discussion

In both cases the island dressing proved an effective barrier as well as being convenient and comfortable. Tegaderm +Pad dressings were easily applied and easily removed without damage to either the wound bed or the surrounding skin. Both patients reported an almost immediate decrease in pain with the first application. Patients were able to go about their usual activities of daily living without any changes in routines including bathing, dressing, and social interaction. The Tegaderm +Pad dressings stayed in place between scheduled dressing changes and remained intact for up to seven days. In no instance did the pad adhere to dried exudate on the wound bed or the periwound skin. Neither the wounds nor the surrounding skin ever appeared macerated. The Tegaderm +Pad dressings maintained moisture levels for optimal healing while being visually acceptable to the patients and providers. Although Case 2 patient's skin was sensitive to numerous products, she did not react to the Tegaderm +Pad dressing. The contact dermatitis which occurred after wearing a foam dressing cleared during the use of Tegaderm +Pad dressing.

# Case Study 1

## Treatment Plan

(Case Study 1 and 2)

The first application of 3M™ Tegaderm™ +Pad Transparent Dressing with Absorbent Pad was applied at the Wound Clinic. The wounds were gently irrigated with normal saline or a nontoxic cleaner. If the edges of the epidermal tear were rolled under, cotton swabs soaked with saline were used to unroll the edge and approximate the wound edges. The area was then gently patted with gauze to remove excess moisture and the Tegaderm +Pad dressing applied. The patient returned to the clinic in two to three days to assess for infection, irritation and condition of the dressing. Dressing changes were scheduled once a week and more frequently if necessary.

### Product Used

3M™ Tegaderm™ +Pad Transparent Dressing with Absorbent Pad.

## Results

Figures 1a–h demonstrate the ability of the Tegaderm +Pad dressing to promote moist wound healing without disrupting the wound. Dressing changes were scheduled every week. The dressings remained securely in place between dressing changes without loss of functional activities. When the dried exudate was removed on day 43 (Figure 1g), the underlying skin was intact, no maceration was seen and the wound had healed. Figure 1h shows remaining discoloration without evidence of scarring.



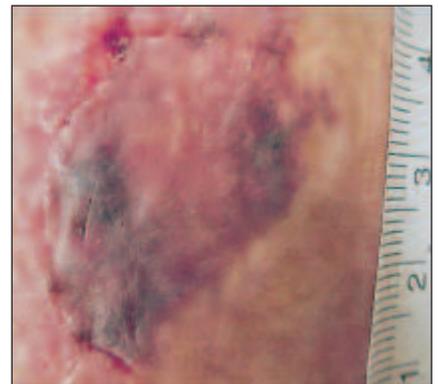
**Figure 1a.** Day 1—Appearance of the wound on presentation to the clinic.



**Figure 1b.** Day 1—Appearance of wound after edges were approximated.



**Figure 1c.** Day 7—Original dressing was intact; removal was easy with no injury to underlying skin.



**Figure 1d.** Day 7—Wound appearance after removal of dressing; no disruption of wound edge.



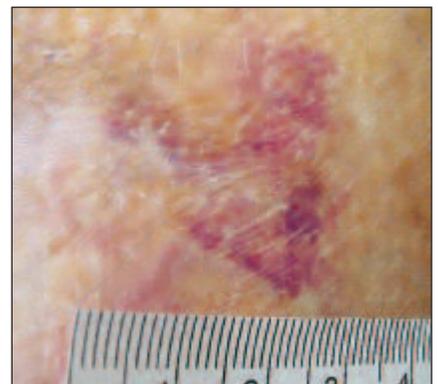
**Figure 1e.** Day 19—Resolving underlying clot; drainage evident on pad with no maceration to the wound.



**Figure 1f.** Day 43—Dried exudate was loose and was lifting away.



**Figure 1g.** Day 43—Loose exudate was peeled away revealing healed skin beneath.



**Figure 1h.** Day 64—No evidence of the original skin tear.

## Case Study 2

### Results

A remarkable improvement in the appearance of the wound was noted after only three days of the clinic's wound protocol. The wound edges remained in contact with the wound bed. A portion of the proximal edge appeared to be sealed and healing. Unfortunately, the home health agency ran out of the Tegaderm +Pad dressing over the weekend and applied a polyurethane foam dressing. When the foam dressing was removed, a dried wound bed and new contact dermatitis were noted in the areas exposed to the foam (Figure 2c). She was brought to the clinic in the afternoon for assessment of the wound. A larger Tegaderm +Pad dressing was applied to cover the dermatitis.

Home health care nurses made regular visits to the patient's home to assess the wound and change the dressing. After the initial Tegaderm +Pad dressing was applied, there were no reported concerns about the appearance of the dressing, the drainage or any adverse wound changes. The wound healed without further problems. Although the wound had closed, we continued to apply the dressing for two weeks to protect the newly healed tissue.

Forty-three days after the injury the patient was discharged from home health. Four weeks later she returned to the clinic because she developed a rash from an antibiotic ointment that she had used to lubricate "tightness" around the remaining scar. She was instructed to discontinue the antibiotic ointment and was given a tube of 3M™ Cavilon™ Foot Emollient Cream to use. Four days later she reported she could no longer see the rash (contact dermatitis; Figure 2d).



**Figure 2a.** Day 1—Skin tear on the dorsal surface of the left foot. (Injury occurred four days prior to treatment initiation.)



**Figure 2b.** Day 4—Skin tear after three days covered with 3M™ Tegaderm™ +Pad Transparent Dressing with Absorbent Pad.



**Figure 2c.** Day 8—The home health agency ran out of 3M™ Tegaderm™ +Pad Transparent Dressing with Absorbent Pad and a polyurethane foam dressing was applied at Day 6. After two days, the wound bed was desiccated and the periwound skin was irritated. Use of Tegaderm +pad dressing was reinstated.



**Figure 2d.** Day 62—Skin tear was completely closed.

### Conclusions

By providing an optimal wound healing environment without disruption of the healing process, Tegaderm +Pad transparent dressing appeared to be an ideal dressing for the treatment of skin tears on the elderly patient.

## References

- Hanson C. 1997. Interactive wound dressings. A practical guide to their use in older patients. *Drugs Aging* 11(4):217–284.
- Malone ML, Rozario N, Gavinski M Goodwin J. 1991. The epidemiology of skin tears in the institutionalized elderly. *J Am Geriatr Soc* 39(6):591–595.
- McGough-Csarny J, Kopac CA. 1998. Skin tears in institutionalized elderly: an epidemiological study. *Ostomy Wound Manage* 44(3A Suppl):14S–24S; discussion 25S.
- Payne RL, Martin ML. 1993. Defining and classifying skin tears: need for a common language. *Ostomy Wound Manage* 39(5):16–20, 22–24, 26.



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