

Management of skin tears in the elderly with a unique absorbent clear acrylic dressing*

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Background

CLINICAL PROBLEM: The skin of the elderly is at high risk for skin tears. Clinically, these wounds are defined as traumatic wounds or lacerations, and usually occur on the extremities as a result of friction and/or shear. There are numerous aging factors that contribute to this phenomenon, few of which can be controlled. Skin tears are generally not life-threatening, but cause considerable discomfort, predispose individuals to infection, and are costly to treat due to frequency of occurrence and prolonged healing time of aged skin. Treatment has yet to be standardized and is often complicated by fragility of aged skin. Generally the principles of moist wound healing apply in combination with strategies to handle drainage. Care must also be applied to avoid further trauma to the skin.^{1,2}

Current Clinical Approach

This facility has standardized first line skin tear treatment with an absorbent clear acrylic dressing[†] in combination with an alcohol-free skin barrier film.[‡] This combination provides a moist and protective environment for healing, while controlling drainage and minimizing damage to the fragile peri-wound skin. Additionally, the ability to monitor the wound through the dressing allows for extended wear time. Two case studies are presented documenting this treatment approach. Case Study 2 also includes episodic use of a silver mesh dressing[†] placed under the absorbent clear acrylic dressing. Prior treatment of skin tears for this facility included the use of antibiotic ointment and gauze dressings.

The table provided below compares the dressing characteristics for the two different treatment modalities.

Dressing Characteristics	Absorbent Clear Acrylic Dressing	Antibiotic Ointment & Gauze Dressing
Absorbent	Yes	No
Able to monitor wound	Yes	No
Easy to apply	Yes	Yes
Extended wear time	Yes	No
Barrier to contaminants	Yes	No
Moist wound environment	Yes	No
Non-traumatic dressing removal	Yes	No

*3M™ Tegaderm™ Absorbent Clear Acrylic Dressing

†3M™ Cavilon™ No Sting Barrier Film

‡3M™ Tegaderm™ Ag Mesh Dressing with Silver

Case Study 1

Patient History

- Fragile 85-year old female resident of a long-term care facility (LTC).
- Admitted for rehabilitation s/p hip fracture sustained from a fall.
- Presented with generalized weakness, difficult ambulation, and anticoagulant therapy.
- Areas of ecchymotic discoloration were noted on all extremities.
- Medical history: hypertension, placement of pacemaker for syncope, CVA, COPD, hip replacement and skin tears as a result of frequent falls.
- Patient age, history of previous falls, skin condition and impaired mobility are consistent with known risk factors for skin tear development.³
- 15 days after admission patient sustained a Class III skin tear⁴ on her lower extremity, (Wound 1), during a transfer from wheelchair.
- Care initiated, see photos at right.
- 7 days later she sustained a Class II skin tear⁴ on her right forearm, (Wound 2), as a result of contact within a doorway.
- Moderate serosanguineous drainage was noted from both wounds.

Wound 1



Day 1: Skin tear lower extremity. 1.3 x 1.5 cm & 1.0 x 0.4 cm.



Day 7: Dressing in place. Wound drainage contained.



Day 7: Removal of dressing without trauma to surrounding skin.



Day 7: Improvement noted, 0.7 x 1.5 cm & 0.3 x 0.5 cm.



Day 14: New dressing applied.



Day 21: Skin tear healed.

Wound 2



Day 1: Skin tear upper extremity 4.0 x 0.2 cm, dressing applied.



Day 7: Dressing changed. Wound healing 1.5 x 0.1 cm.



Day 14: Skin tear healed.

Outcomes

- Dressings remained in place up to 7 days.
- Wound could be monitored through the dressing, avoiding unnecessary dressing changes.
- The dressing provided protection from trauma during healing process.
- The dressing provided a moist wound healing environment.
- Total healing time of Wound 1 within 21 days.
- Total healing time of Wound 2 within 14 days.
- There were no reports of adverse events, residue, adhesive trauma, or dressing adherence to the wound bed.

Case Study 2

Patient History

- A frail, confused, deconditioned, 85 year old female was admitted to a long-term care facility (LTC).
- Diagnoses: fractured vertebrae, retinal hemorrhage secondary to frequent falls, osteoporosis, hypertension, and bilateral lower extremity edema.
- Medical history: impaired cognition, history of falls, L1 compression fracture with kyphoplasty, dysphasia, and PEG tube placement.
- In addition to above, her age; complex medical history; impaired mobility; polypharmacy; and history of falls placed this patient at high risk for skin tear development.³
- 1 month after admission to LTC sustained a traumatic Class III skin tear.⁴
- Wound presented as a draining hematoma, creating increased risk of infection.
- Care initiated, see photos at right.
- 4 weeks after initial injury, patient sustained traumatic re-injury to skin tear site.
- Total healing was noted within 12 additional days.

Outcomes

- Dressings remained in place up to 7 days.
- Wound could be monitored through the dressing, avoiding unnecessary dressing changes.
- Dressing provided a moist wound healing environment.
- Total healing of lower extremity wound, including re-injury, was complete within 40 days.
- There were no reports of adverse events, residue, adhesive trauma, or dressing adherence to the wound bed.



Day 1: Skin tear, Right Lower Extremity 1.0 x 1.5 cm.



Day 1: Silver mesh dressing[†] applied under initial absorbent clear acrylic dressing prophylactically for increased infection risk.



Day 14: Dressing intact, wound nearly healed, 0.1 x 0.1 cm.



Day 28: Traumatic re-injury at same site. 0.5 x 0.7 cm. Patient compromised with UTI, silver mesh dressing[†] used prophylactically for 1 dressing change.



Day 40: Wound healed.

Conclusions

- In this case study, the absorbent clear acrylic dressing provided a protective, moist wound healing environment for the management of skin tears.
- Transparency of the absorbent clear acrylic dressing allowed for monitoring the wound without the need for frequent dressing removal.
- Extended wear time of the absorbent clear acrylic dressing, in combination with use of an alcohol-free barrier film, helped to minimize the potential for damage to fragile peri-wound skin while skin tears healed.

References

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Acknowledgments

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