

Management of Skin Tears using

3M™ Tegaderm™ Absorbent Clear Acrylic Dressings in a Low Care Dementia Unit

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Introduction

Skin tears are the most common wound found among the elderly population, (Carville, 2008). This is particularly evident in the Dementia Specific Low Care Unit in this case study, where residents remain very mobile but disoriented and confused. As a result there was an increased risk of falls and injuries due to the residents wandering around the Low Care Unit throughout the day.

The management of skin tears in residents with dementia can be challenging. Issues include residents removing dressings after application, causing further injury and wound infection which can all delay wound healing. The skin tear is often in an area that is not easily visible to the carer or nurse and therefore might not be noticed for hours or even until the next day when the resident is assisted with a shower. By this time the skin tear may already be infected requiring antibiotics and requiring more frequent intervention. This adds extra workload for the care staff but is also irritating and distressing to the resident with dementia.

The current management of skin tears in the facility was Adaptic™ Dressings (Johnson & Johnson) followed by a non stick pad such as Menolin™ Low Adherent Wound Dressing (Smith & Nephew) and secured with Hypafix™ Tape (Smith & Nephew) or 3M™ Tegaderm™ Film Dressings. Challenges with the current regime included the need for frequent dressing changes due to the Adaptic Dressings drying out after 1-2 days as well as residents removing dressings unnecessarily, increasing the risk of infection.

If the skin tears became infected the GP would be notified, antibiotics prescribed accordingly and the dressing changed to an antimicrobial dressing such as Inadine™ Dressings (Johnson & Johnson).

Due to the above challenges, as well as an inconsistency among care staff in education and training in skin tear management and wound care dressings, it was decided to evaluate a range of wound care dressings to improve the management of skin tears in the unit and the overall group of aged care facilities in the region. Our facility was a key evaluation site due to the added challenge of the dementia residents. Three different products were trialled which included a silicone dressing, a foam dressing and a long wear acrylic dressing. Two of the three products proved to be quickly ineffective as residents removed the dressings within 12 hours of application.

The following case studies are an evaluation of Tegaderm Absorbent Dressings used on five residents with different category skin tears.



3M

Tegaderm Absorbent Dressings provide all the benefits of a polyurethane film dressing but have the additional advantage of being absorbent with no upper wear time. This benefit as well as the transparency of the dressing prevents unnecessary dressings changes and allows undisturbed wound healing.

The STAR Classification System, (Carville et al, 2007) was used to classify the skin tears in the evaluation and was being implemented into the aged care facility and region at the time of the evaluation to improve the assessment, documentation and reporting of skin tears in the overall region.

Case Studies

Patient 1

82 year old female resident sustained a Category 2B skin tear to her right elbow, the wound measured 3cm x 1cm with bruised and fragile surrounding skin. Her medical history included dementia, ischaemic heart disease, atrial fibrillation, depression, resident had a pacemaker.

Tegaderm Absorbent Dressing was applied on Day 1 together with 3M™ Cavilon™ No Sting Barrier Film to protect the surrounding skin. Tegaderm Absorbent Dressing remained intact for 11 days and upon removal the wound was almost healed requiring just two applications of Tegaderm Film Dressing for protection of the epithelising tissue for a further 8 days. No infection occurred during the episode of wound healing and the resident did not remove any of the dressings.

Patient 2

90 year old female resident sustained a Category 2B skin tear to her left elbow, the wound measured 3cm x 2cm with bruised, fragile and inflamed surrounding skin. Her medical history included dementia, hypertension, aortic valve sclerosis, a history of falls, anxiety, chronic obstructive pulmonary disease, cataract removal and macular degeneration.

Tegaderm Absorbent Dressing was applied on Day 1, together with Cavilon No Sting Barrier Film. Tegaderm Absorbent Dressing remained intact for 8 days. On Day 8 another Tegaderm Absorbent Dressing was applied which remained intact for a further 10 days. Upon removal the wound was almost

healed requiring Tegaderm Film Dressing for 9 days to protect the fragile epithelising tissue. No infection occurred throughout the management of the skin tear and all the dressings remained intact without removal by the resident.

Patient 3

The same 90 year old female resident sustained another skin tear during the evaluation period, a Category 2B skin tear to her left shin, the wound measured 3cm x 3cm and her surrounding skin was bruised.

3M™ Steri-Strip™ Skin Closures were applied on Day 1 as the nurse on duty was not aware of the evaluation of the Tegaderm Absorbent Dressing and so the usual wound care dressings were used. The wound was dressed with Adaptic Dressings, Melonin Dressings and Hypafix Tape. The dressings were changed on Day 2 due to increased exudate and on Day 3 the Steri-Strip Skin Closures were removed as they were peeling off and moist. Tegaderm Absorbent Dressing and Cavilon No Sting Barrier Film were then applied and remained intact for seven days. After this period of time, the skin tear was reviewed and the wound was healed requiring no further dressings.

Patient 4

88 year old male resident sustained a Category 3 skin tear to his right shoulder, the wound measured 3cm x 3cm and the surrounding skin was fragile and inflamed. He had a medical history of dementia.

Tegaderm Absorbent Dressing and Cavilon No Sting Barrier Film were applied on Day 1 and remained intact for 17 days. On removal of the Tegaderm Absorbent Dressing, some slough was evident on the wound bed and an Inadine Dressing and a Tegaderm Film Dressing were applied and left in place for 6 days. No further dressings were required and the wound was healed after this time.

Patient 5

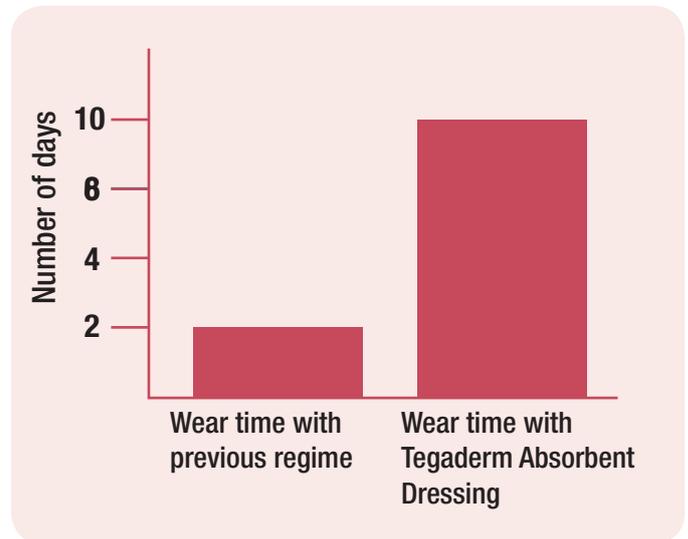
81 year old female resident sustained a Category 3 skin tear as a result of a fall to her left lateral calf, the wound measured 7cm x 2cm with fragile surrounding skin. She had a medical history of dementia.

The resident was admitted to hospital following the fall where Steri - Strip Skin Closures were applied to the wound. The skin tear had no skin flap (Category 3) and when the resident was back in the dementia unit on Day 3 the Steri Strip Skin Closures were removed and Tegaderm Absorbent Dressing and Cavilon No Sting Barrier Film applied. Unfortunately, the dressing was removed after 2 days due to a GP request to view the wound even though the dressing was transparent. Tegaderm Absorbent Dressing and Cavilon No Sting Barrier Film was re-applied and left intact for 8 days. Tegaderm Absorbent Dressing and Cavilon No Sting Barrier Film was re-applied and changed after 3 days due to leakage as the resident had picked the side of dressing. Following this Tegaderm Absorbent Dressing and Cavilon No Sting Barrier Film were re-applied and left intact for 20 days. On removal of the dressing some over granulation tissue was present, Inadine Dressing was then used over a two week period (requiring more frequent dressing changes) to manage the overgranulation. Once the over granulation was resolved, the wound was managed with Tegaderm Film Dressing to protect the fragile skin until day 71 when the wound was finally healed.

Conclusion:

Tegaderm Absorbent Clear Acrylic Dressings were found to be an effective solution for the management of skin tears for the following reasons:

- The average wear time for the above 5 resident evaluations was 10 days versus the current regime where dressings lasted 1 – 2 days. This demonstrated a cost effective solution as it reduced the amount of product used due to the longer wear time of the dressing.
- Can be used on all category skin tears which makes for 'easy' dressing selection. This is particularly important for staff in low care units that are not Registered Nurses.
- Manages exudate effectively which increases wear time.
- Reduces staff time as the dressing simply needs to be checked it is in place daily and only changed when required.
- Difficult for the resident to self remove.
- Easy to apply, no cutting of the dressing required.
- Provides a waterproof, bacterial and viral proof barrier.
- Transparent therefore allows the nurse to easily track the progress of the wound without disturbing the healing process.



Based on the results of the evaluation Tegaderm Absorbent Dressing in conjunction with Cavilon No Sting Barrier Film has now been chosen to be implemented into a Skin Tear Protocol for the aged care facility and the facilities in the region.

This protocol is part of a wider educational programme that is being rolled out regionally for the overall management and prevention of skin tears.

References

- Carville, K; Lewin, G, Haslehurst, P; Michael, R; Santarmaria, N & Roberts, P. (2007) STAR: a consensus for skin tear classification. Primary Intention. Vol 5 (1): 18 – 28
- Carville, K. (2008). Shinning light on skin tears. Australian Ageing Agenda. 64 – 65.

Skin Tear Management Protocol

Adapted from STAR Skin Tear Classification System Guidelines, (Carville et al 2007)

Basic Principles

1. Control bleeding and clean the wound according to protocol.
2. Realign (if possible) any skin or flap.
3. Assess degree of tissue loss and skin or flap colour using the STAR Classification System.
4. Assess the surrounding skin condition for fragility, swelling, discolouration or bruising.
5. Assess the person, their wound and their healing environment as per protocol.
6. If skin or flap colour is pale, dusky or darkened reassess in 24-48 hours or at the first dressing change.

Category		Management
Category 1a A skin tear where the edges can be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour is not pale, dusky or darkened		<ul style="list-style-type: none"> • Control bleeding • Cleanse the wound with normal saline • Approximate edges / re – align skin flap • Apply an even layer of 3M™ Cavilon™ No Sting Barrier Film (wipe) to the wound edges and to extend beyond where the dressing will be • Apply 3M™ Tegaderm™ Absorbent Clear Acrylic Dressing
Category 1b A skin tear where the edges can be realigned to the normal anatomical position (without undue stretching) and the skin or flap colour is pale, dusky or darkened		<ul style="list-style-type: none"> • Control bleeding • Cleanse the wound with normal saline • Approximate edges / re – align skin flap • Apply an even layer of Cavilon No Sting Barrier Film (wipe) to the wound edges and to extend beyond where the dressing will be • Apply Tegaderm Absorbent Clear Acrylic Dressing
Category 2a A skin tear where the edges cannot be realigned to the normal anatomical position and the skin or flap colour is not pale, dusky or darkened.		<ul style="list-style-type: none"> • Control bleeding • Cleanse the wound with normal saline • Approximate edges / re – align skin flap as much as possible without stretching • Apply an even layer of Cavilon No Sting Barrier Film (wipe) to the wound edges and to extend beyond where the dressing will be • Apply Tegaderm Absorbent Clear Acrylic Dressing
Category 2b A skin tear where the edges cannot be realigned to the normal anatomical position and the skin or flap colour is pale, dusky or darkened.		<ul style="list-style-type: none"> • Control bleeding • Cleanse the wound with normal saline • Approximate edges / re – align skin flap as much as possible without stretching • Apply an even layer of Cavilon No Sting Barrier Film (wipe) to the wound edges and to extend beyond where the dressing will be • Apply Tegaderm Absorbent Clear Acrylic Dressing
Category 3 A skin tear where the skin flap is completely absent.		<ul style="list-style-type: none"> • Control bleeding • Cleanse the wound with normal saline • Apply an even layer of Cavilon No Sting Barrier Film (wipe) to the wound edges and to extend beyond where the dressing will be • Apply Tegaderm Absorbent Clear Acrylic Dressing

Points to note:

Once Skin Tear has healed

- On removal of Tegaderm Absorbent Clear Acrylic Dressing and if epithelising (pink) tissue is present apply Tegaderm Transparent Film Dressing for a further 7 days

When to change Tegaderm Absorbent Dressing

Tegaderm Absorbent Dressings are designed to be left in place for extended periods of time and early removal may interfere with skin tear healing, however a change is required when:

- Leaking occurs
- The absorbent pad appears full and hardens slightly
- If there are any signs of infection, e.g. fever, increased pain, redness, hot and inflamed surrounding skin, bleeding etc. Notify GP/RN or Manager and consider the use of an anti – microbial and continue monitoring of the skin tear.



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Tegaderm™ Absorbent

Long-Wear Clear Acrylic Dressing

References: Carville, K. Lewin, G. Newall, N. Haslehurst, P. Michael, R. Santamaria, N. & Roberts, P. (2007) STAR: A consensus for skin tear classification. Primary Intention. 15(1): 18 - 28