## **SKIN TEAR PREVENTION:**

Strategies for Preventing Skin Injury in At-Risk Populations





# INTRODUCTION

Skin tears and other types of medical adhesive-related skin injuries (MARSI) are serious and common problems, particularly among at-risk populations such as older adults and those with diabetes and other medical conditions that may weaken the skin. Issues associated with skin tears can cause patient discomfort, delayed wound healing, and infection, leading to significant costs and morbidity and mortality risks. To manage this problem, it is important that health care professionals understand what causes skin tears and take steps to prevent them.<sup>1-4</sup>

## WHY SKIN TEAR PREVENTION IS CRITICAL

Skin tears can have serious implications, both for patient outcomes and for finances. They have prevalence rates greater than or equal to those of pressure ulcers/injuries and often lead to more severe complications that can be dangerous for patients and result in longer hospital stays.<sup>5</sup> This makes it extremely important that health care professionals take steps to prevent skin tears and manage their effects.

## **Economic Impacts**

Skin tears often require additional care, healing time, and dressing changes. This takes up valuable human resources and costs health care providers and patients additional money.<sup>4</sup> One study found that a community with moderate wound incidence rates required the equivalent of 57 full-time nurses for wound care of approximately 694 patients. This can translate to significant expense and lost time that nurses could spend on other activities.<sup>6</sup> Skin tears also have a higher risk of becoming complex chronic wounds, which often are more costly to treat and require longer hospital stays.<sup>5</sup>

#### **Patient Outcomes**

Skin tears can contribute to the exacerbation or the development of wounds. The wounds may also be at greater risk of infection and other issues.<sup>4</sup> Difficult to dress wounds present even greater problems in all of these areas because it is often challenging to secure the dressing adequately and ensure a proper seal. This can ultimately lead to infections, moisture-associated skin damage (MASD), or other medical issues that may cause pain or sepsis or necessitate more frequent dressing changes.<sup>1</sup> Patients with skin tears also frequently report pain and a decreased quality of life.<sup>5</sup> These issues make it extremely important for health care professionals to make skin tear prevention a priority to prevent unnecessary discomfort for patients.

\*\*Patients with skin tears also frequently report pain and a decreased quality of life.\*\*

## STRATEGIES FOR PREVENTING SKIN TEARS

Given the cost and complications associated with skin tears, it is critical that health care professionals follow best practices to prevent them. This means identifying at-risk patients through proper assessment, using gentle medical adhesives, and taking steps to promote good skin health. By taking proactive steps, it is possible to significantly reduce the risk of skin tears and their negative effects.<sup>7</sup>

### Skin Tear Risk Factors

To reduce the incidence of skin tears and manage their effects, it is important for health care professionals to understand the common causes of these tears. This will help ensure that it is possible to identify at-risk patients and take steps to eliminate potential risk factors. Skin tears are generally directly caused by friction or blunt force trauma, but they may have many underlying causes. Understanding the complex factors that can lead to skin tears is critical to prevention.<sup>7</sup>

Friction and Blunt Force Trauma –

Skin tears occur when excessive friction or trauma results in the separation of the outer layers of the skin. Although there may be other factors leading to the development of skin tears, it is ultimately these forces that cause all skin tears, and taking steps to prevent them or reduce their impact is the first and most important step in any skin care prevention strategy.<sup>7</sup>

Chronic Disease – Disease such as heart disease and renal failure can compromise skin integrity. Chronic diseases may also impair mobility or vision and lead to increased risk of falls or other injury. These risk factors are particularly common among older adults.<sup>5</sup>

**Polypharmacy** – Medications such as corticosteroids may compromise skin integrity or increase risk for falls. This can contribute to skin tear development and necessitate greater care from health care professionals.

hydration and Nutrition – Obese, poorly hydrated, and undernourished patients may also have compromised skin health and be at greater risk of skin tears. It is important for nurses and health care professionals to assess patients' vitamin A, B, and D levels, as well as their iron, zinc, and copper levels, to ensure that patients are properly nourished. Malnutrition can also lead to other complications, such as delayed wound healing and infections.<sup>5</sup>

Age – Older adults are more susceptible to skin tears for many reasons. They may have drier or more fragile skin, which can become damaged more easily. Older adults may also be more likely to have other common risk factors such as poor nutrition, steroid use, and chronic disease.<sup>7</sup>

**Mobility and Vision Issues** – Patients with vision or mobility issues may be more likely to fall or injure themselves, thereby leading to skin tears. Immobile patients may also be more likely to experience friction or injury while being moved.<sup>7</sup>

**Skin Health** – Skin that has been compromised by infection, allergic reaction, or exposure to an irritant may be at a greater risk of skin tearing.<sup>7</sup>

Medical Adhesives – The removal of medical adhesives is a form of mechanical trauma and one of the most common causes of skin tearing. Skin that has already been weakened by a wound and associated complications can be easily damaged when strong medical adhesives are removed, further damaging the wound area.<sup>6</sup>

## Assess Your Patient's Risk Level

Health care professionals can follow a basic risk assessment strategy to help identify patients that require skin tear risk reduction help. If a patient has at least one of the above risk factors, they are at risk of skin tears and a risk reduction program should be implemented that addresses the patient's risk factors. Those who are visually impaired, mobility impaired, at extreme age, or who have suffered from previous skin tears are at high risk and a more aggressive skin tear reduction program should be put into action immediately. If the patient does not have any risk factors, they should be reassessed regularly for any change in status.<sup>5</sup>

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## Take Preventative Steps

Health care professionals can take several steps to address these risk factors. By following guidelines for skin care and reducing the risk of injury, it is possible to control the incidence of skin tears and promote better patient health.<sup>6</sup>

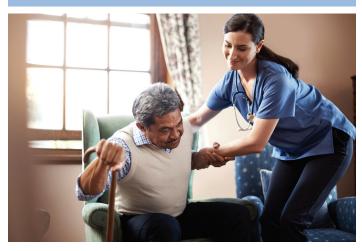
#### **STEP 1: IDENTIFY RISKS**



The first step in skin tear risk reduction is identifying any risks factors to which the patient may be prone. If a patient has a previous skin tear or other wound, the wound and the surrounding skin should both be assessed for any signs of damage or weakness. All risk factors should be noted and prioritized. This helps the care team develop a program and set goals that help minimize the patient's unique risks and ensure that the chances of developing skin tears are as low as possible.<sup>5,8</sup>

"...set goals that help minimize the patient's unique risks."

#### **STEP 2: MANAGE RISKS**



Once the patient's risks have been identified, the care team can begin taking steps to manage those risks. This generally involves adjusting the patient's living environment, skin care regimen, and wound treatment. The care team should regularly confer with the patient at this stage to ensure that the changes help improve the patient's quality of life.<sup>5</sup>

#### **Skin Tear Prevention Points**

Reduce Risk of Injury – Those at risk of skin tears can be protected from injury by increasing safety in their living environment. Sharp or obtrusive objects should be removed from areas where they might pose a risk, and best practices should be followed when helping a patient move. The use of walking aids such as canes can also help prevent injury in some cases.<sup>6</sup>

Protect the Skin – Skin care best practices should be followed for all patients at risk of skin tears. Skin should be cleansed using non-cytotoxic solutions such as clean water or non-ionic surfactant. Wounds should be regularly debrided and treated with dressings that maintain a proper moisture balance for fragile skin. Care should also be taken to control infection and maintain a bacterial balance. Patients with sensitivities may also benefit from eliminating direct skin adhesive contact.<sup>8</sup>

Choose the Right Adhesive – Adhesives have several properties, each important to their overall effectiveness in a wound care environment. The tack property describes the stickiness of the adhesive, whereas pressure is the amount of force required to secure the dressing. Release and peel refer to the amount of force required to remove the adhesive from the skin. This is an extremely important factor in the prevention of MARSI and skin tears. Choose an adhesive that requires minimal force to apply and remove while still maintaining a secure, waterproof hold. Each adhesive will also cause a certain amount of sensitivity depending on the patient's predispositions or allergies. To prevent any issues, health care professionals should select a low-allergy or hypoallergenic labeled tape.3

Remove Adhesives Safely – Dressing removal can pose a significant risk for skin tearing if it is not performed properly. Remove transparent films by releasing the corner and slowly lifting. This helps minimize the risk of damage. It is also important to avoid harsh cleansers and solvents before reapplication of the dressing. Instead, use simple soap and water and then pat the skin dry before applying the dressing.<sup>3</sup>

#### **STEP 3: EVALUATE RISK REDUCTION PLAN**



After the risk reduction plan has been implemented, the care team should assess the sustainability and effectiveness of this plan. The patient should be assessed, and any new skin tears or risk factors should be noted. The plan can then be altered to address any problems or new risk factors.<sup>5,8</sup>

"...assess the sustainability and effectiveness of this plan."

# The Importance of Using More Effective Medical Adhesive Products

One of the most common causes of skin tearing is the use of excessively harsh medical adhesives. Repeated application and removal of these products can irritate, damage, and tear the underlying skin. Using a gentler and more effective medical adhesive product can allow dressings to stay secure longer, even in unusual locations. This can help reduce the risk of skin tearing while ensuring that wound dressings are secure.<sup>1,2</sup>

## HOW HY-TAPE PRODUCTS CAN HELP



Hy-Tape offers a range of medical adhesive products that are secure and effective. Hy-Tape products are also extremely gentle, minimizing the risk of skin tearing or other medical adhesive-related complications. Hy-Tape uses only zinc oxide-based adhesives, which hold tight even when wet but release gently, reducing the risk of irritation on sensitive skin.<sup>7</sup>

Hy-Tape strips, patches, and kit rolls provide a wide range of options for securing dressings in unusual

positions. Hy-Tape products are strong and low impact, allowing them to hold a dressing firmly in place, no matter the location. By framing dressings with Hy-Tape, you can reduce the risk of peeling corners and create a longer-lasting dressing that will stay on for the entirety of the prescribed time. Hy-Tape products are also nurse approved. In a recent study involving patients with stage 2, 3, and 4 pressure ulcers treated with a hydrocolloid dressing secured by Hy-Tape, Hy-Tape was given an "Excellent" rating by health care practitioners.<sup>8</sup>

\*\*Hy-Tape is a gentle, secure, and waterproof medical adhesive that can effectively hold ostomy appliances in place for several days, even during exercise or other strenuous activity. \*\*

Hy-Tape patches, rolls, and strips also come in several varieties and are designed for specific applications. Hy-Tape strips are available in 1.25" × 6" pre-cut, single-use tape strips to reduce the need for health care providers to cut them down to specific sizes, and Hy-Tape occlusive patches can save on dressing costs by completely covering and sealing the wound without the need for multiple layers of tape. Hy-Tape rolls also come in widths up to 4" to accommodate all dressing sizes. This makes Hy-Tape medical adhesive products the ideal choice for securing dressings in difficult locations.

With an occurrence rate greater than or equal to that of pressure ulcers, skin tears are an issue that must be addressed by health care providers. At-risk populations—such as older adults, those with diabetes, or others who have weakened skin—experience a higher incidence rate of skin tears, and these injuries can be very costly for the patient and for health care providers. Steps must be taken to protect at-risk patients. Hy-Tape can help. With its gentle yet secure grip, Hy-Tape products minimize the risk of skin tears while also holding dressings securely in place. Hy-Tape products are effective and safe, and they have a proven record of reducing irritation to sensitive skin.<sup>7</sup>

To learn more about how Hy-Tape can help reduce the risk of skin tears, contact one of our representatives or visit us online today at www.hytape.com.



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