

Reducing The Risk Of Superficial Skin Damage Related To Adhesive Use

Superficial skin damage can occur when adhesive products are used. Skin stripping and tension blisters are the most common problems associated with taping. Many of these injuries may be prevented by correct use including careful attention to skin preparation, choice of tape, and proper application and removal of tape. Less common types of skin damage are irritant contact dermatitis, allergic contact dermatitis, folliculitis and maceration. A small percentage of individuals may experience hypopigmentation or hyperpigmentation of the skin following the removal of an adhesive

product. Similar problems may occur with skin closure strips.		
Problem	Cause	To reduce the risk of injury
Stripping	A partial thickness injury may occur where tape is frequently re-applied to the same area of skin. As tape is removed, the epidermisal cells remain attached to the adhesive, which may result in a painful area of moist exposed dermis. Degree of stripping varies with skin condition, adhesive characteristics, and frequency of taping.	 Use gentle, hypoallergenic tape Match strength of adhesive to clinical needs and skin condition Apply tape to clean, dry skin For high risk patients, avoid using skin tackifiers under tape Protect skin with 3M™ Cavilon™ No Sting Barrier Film allowing it to dry before taping If repeated taping is anticipated, consider applying tape over a platform Use proper removal technique
Mechanical injury due to Tension	The most common causes of tension injury are inappropriate strapping of tape during application and distention of skin under an unyielding tape. Strapping tape across skin is mistakenly thought to increase adhesion. As the tape backing	 Apply tape without tension Identify patients at high-risk: fragile skin, medical conditions (e.g., long-term corticosteroid use, malnutrition) or surgical procedures where oedema



resists stretch or regains its original shape, the epidermis begins to lift. This results in 'tension blisters' typically seen at ends of the tape. Skin tears may occur before a blister even forms. Tension injuries may also occur when oedema, haematoma formation, or distention distorts the skin surface or when a joint or other area of movement is covered with an unyielding tape.

- or distention is expected (abdominal, orthopaedic)
- Protect skin with 3MTM CavilonTM No Sting Barrier Film
- If swelling or movement is expected, use a tape that stretches. Apply tape so direction of stretch corresponds with direction of swelling
- If desired, compression may be obtained by carefully stretching tape over a dressing while securing the tape to the skin without tension.
- If distention or oedema is noted, loosen, reposition, or replace tape



Problem Non-Allergic Contact Dermatitis

Cause

To reduce the risk of injury



A non-allergic contact dermatitis may result when chemical irritants such as tackifiers or some skin preparations are trapped between adhesive and skin. The affected area will correlate to the area of exposure and may appear reddened, swollen, blistered, or weeping.

- Assure that skin is clean and dry before applying tape
- Protect skin with 3MTM CavilonTM No Sting Barrier Film allowing it to dry before applying tape
- If possible, avoid using tackifiers

Allergic Contact Dermatitis



Allergic reactions are cellmediated immunologic responses to a particular component of a tape adhesive or backing and occur infrequently. Patients may be mistakenly identified as having tape allergies when, in fact, they have experienced a non-allergic contact dermatitis. Clinical signs include welldefined areas of erythema and oedema; vesicles may be present, as well as small erosions.

- Identifying type of tape causing sensitivity
- Options may include identifying an alternative hypoallergenic tape or contacting tape manufacturer for assistance
- Using 3MTM CavilonTM No Sting Barrier Film may not prevent an allergic reaction

Folliculitis



Folliculitis is an inflammation of the hair follicle caused by shaving, blockage of the follicle entrapment of bacteria.

• Use a clipper or depilatory preparation if hair removal is necessary

Maceration



Maceration refers to skin changes seen when moisture is trapped against the skin for a prolonged period. The skin will turn white or grey, softens and wrinkles. Macerated skin is more permeable and prone to damage from friction and irritants.

- Keep taped skin clean and dry
- Replace tape if soiled
- Use breathable tape in moist areas
- Avoid occlusive tapes unless clinically indicated



3M Health Care

3M House Morley Street Loughborough Leicestershire LE11 1EP Telephone (01509) 611611 Facsimile (01509) 237288 Website: http://www.3mhealthcare.co.uk

3M Ireland

3M House, Adelphi Centre Dun Laoghaire Co Dublin Ireland Telephone (01) 280 3555 Facsimile (01) 280 3509

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