Skin care protection for urostomates

Skin is the largest organ of the body and is the first line of defence in protecting the body from the surrounding environment. When this important organ is breached, either intentionally or unintentionally, the body is vulnerable to a wide variety (and severity) of issues. The superficial layer of the skin is the stratum corneum and this is the primary protective barrier preventing exit or entry of molecules through the skin. If the stratum corneum breaks down, the function of the skin can be compromised, and skin disorders can arise.

Peristomal skin disorders can occur from the frequent application and removal of stoma appliances which can damage skin by stripping away the epidermal layer (Black, 2007). Delicate peristomal skin can be subjected to repeated removal and repeated re-application of the adhesive appliance, usually around two to three times per day for a colostomate and between two to five times per week for ileostomates or urostomates depending on individual requirements (Berry, 2002).

Adhesive removers

Removal of adhesive appliances such as stoma pouches is usually performed using medical adhesive removers which in general are alcohol/solvent based, oil-based or more recently silicone-based products. The use of alcohol is now a dated and inefficient approach to adhesive removal as the process relies upon a relatively long, time-consuming action to dissolve the adhesive and also has the associated concerns of alcohol e.g. astringent, drying, irritating and painful effects on the ostomate’s skin (Berry et al., 2007).

Oil-based adhesive removers also have a relatively slow action. Though not as efficient as silicones, they are unlikely to cause direct damage to skin and once the appliance is removed the peristomal skin needs to be thoroughly cleansed of any oily residue before the next pouch is fitted (Colostomy Association, 2008).

Silicone-based medical adhesive removers have been recently introduced into the market and have unique characteristics i.e. no sting on application, track rapidly between the skin and the adhesive appliance allowing gentle release of the appliance, evaporate completely in seconds and leave no oily residue. This allows the next appliance to be attached safely and securely. Overall, silicone-based medical adhesive removers are now recognised as the product of choice for adhesive appliance removal (Berry et al., 2007).

Other possible causes of peristomal skin irritation have been identified as faecal leakage, mechanical irritation, allergy/hypersensitivity, sweating and pre-existing skin disease (Black, 2002). Stoma effluent was identified as a related cause of skin disorder in 77 per cent of participants in a Danish stoma community cross sectional study (Herlufson, 2006). Also reported was that the overall frequency of peristomal skin disorders was determined to be higher for participants with an ileostomy (57 per cent) and urostomy (48 per cent) than those with a colostomy (35 per cent), (participants n=202). The study also revealed that participants frequently failed to perceive they had a skin disorder and did not seek help. This lack of self-recognition of skin disorders by ostomates is not investigated here but does require further investigation with a potential goal of either educating the ostomate population in recognising the early signs of skin disorders, or increased frequency of stoma care clinic visits, or both.

Skin barrier films

It is important that an effective skin care protection regime is in place. Not only will this assist with the atraumatic removal of the appliance but also the use of barrier films will protect delicate peristomal skin from degradation as a result of urine and faecal leakage. In one

For further information please contact Bullen Healthcare – FREEPHONE 0800 888 501. All products are available on FP10 from dispensing appliance contractors and pharmacies.

Figure 1: Niltac™

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Article commissioned by Trio Healthcare Ltd.
**Product Review**

### Table 1: Case studies

<table>
<thead>
<tr>
<th>Case study</th>
<th>Age</th>
<th>Skin condition</th>
<th>Duration of condition</th>
<th>Time on regime to improve</th>
<th>Skin Condition post regime</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>61</td>
<td>Excoriated/broken</td>
<td>&lt;1 week</td>
<td>1-3 days</td>
<td>Normal/good</td>
<td>After only 3 days of Silesse, skin back to normal</td>
</tr>
<tr>
<td>Male</td>
<td>72</td>
<td>Excoriated</td>
<td>&lt;1 month</td>
<td>1-3 days</td>
<td>Normal/good</td>
<td>On final visit to clinic which was 4/52 post surgery and 2/52 after commencing use of skin barrier spray skin was back to normal</td>
</tr>
<tr>
<td>Male</td>
<td>73</td>
<td>Excoriated</td>
<td>&lt;1 month*</td>
<td>7-10 days*</td>
<td>Normal/good</td>
<td>*Patient found spray difficult to use due to arthritic fingers-changed to wipes</td>
</tr>
</tbody>
</table>

*Patient found spray difficult to use due to arthritic fingers-changed to wipes.

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**Figure 2: Silesse™**

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**Study**

This article provides information on peristomal skin care protection in urostomates through the adoption of a skin care protection regime using Niltac™ and Silesse™ and (Figures 1 & 2). A main feature of these Trio products is that the formulations are 100 per cent silicone and do not therefore include latex, parabens, fragrances etc.

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**Urostomate**

The Urostomy Association estimate that there are approximately 11,000 people with urinary diversions in the UK and around 800 new ones created each year (Urostomy Association, 2008). Urostomates at the end of the surgical procedure, have a urinary diversion through an ileal-conduit and urostomy. This presents the new urostomate with a major life-style change and as such requires careful pre and post operative education including routine stoma management, diet and exercise. The importance of regular communication between the specialist stoma nurse and the patient should not be undervalued as many problems can be averted with early recognition, subsequent diagnosis and treatment. One area that greatly benefits from this regular communication between the urostomate and the nurse specialist is the potential early recognition of adverse peristomal skin conditions.

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**Product background**

Niltac™ does not contain any alcohols or oils which may sting or leave a residue following application. The product is designed for the rapid and atraumatic removal of adhesive attached medical appliances such as urostomy, colostomy and ileostomy pouches and male urinary incontinence sheaths. The Niltac™ rapidly tracks between the adhesive appliance and the skin gently releasing the appliance in seconds. Niltac™ is designed to evaporate rapidly and completely, leaving no residue so that the next appliance can be fitted as normal. Silesse™ also does not contain alcohol, oil or petroleum jelly based ingredients and as such will not sting or leave oily residue following application. Silesse™ is also an advanced 100 per cent silicone product designed to dry rapidly, forming a durable barrier film, which protects the skin from being adversely affected by adhesive appliances, urine and faecal leakage, and other body fluid attack.

This review reports on the general use of the products in the St James University Hospital Urology department and specifically the outcomes from three case studies using both products in a skin care protection regime.

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**Case study**

**Aim of the evaluation**

The aim of this clinical evaluation was to determine the efficacy of Niltac™ and Silesse™ in providing a skin care protection regime that would help improve the daily quality of life in urostomates.

**Methods**

Each urostomate was assessed prior to the skin care protection regime:

- **Skin condition**
- **Duration of condition**

Sting perception on application was noted. The duration of the skin care protection regime was recorded, skin condition re-assessed and the overall patient comfort rated. Assessment of the clinical benefit of the skin care protection regime was based on the final skin condition and if the urostomate’s overall daily quality of life had improved.

**Discussion**

The urostomates, one male and two female with ages 61, 72 and 73 years old each presented with either excoriated (two patients) or excoriated/broken (one patient) skin conditions. This was causing discomfort and distress during daily wear and appliance changing. The adverse skin condition was considered to be as a result of skin stripping, urine leakage and lack of protection of sensitive skin from the adhesive
appliance during wear. The adverse skin condition duration was estimated at one week (one patient) to one month (two patients) prior to the treatment regime. Once the skin care regime was in place the skin improved to normal within one to three days for the two female urostomates and between seven to ten days for the male urostomate. The longer time taken for the male urostomate skin improvement was found to be as a result of the patient being unable to use the skin barrier spray due to arthritic hands and discontinued use. When the patient changed to Silesse™ Wipes the skin care protection regime was resumed and the skin improved to normal.

**Conclusion**

None of the patients experienced any sting or cold shock on application and have incorporated the products into their normal appliance change routine. Since the adoption of Niltac™ and Silesse™ as part of urostomate’s daily routine, both the overall skin condition and patient comfort during appliance changing has greatly improved. Pre and post regime skin assessment and patient comfort assessment lead the author to conclude that where protection from adhesive skin stripping and stoma fluid leakage is required, the clinical benefits of Niltac™ and Silesse™ should be considered as essential in improving this area of the patient’s quality of life.

**References**


Colostomy Association (2008) “Your skin is amazing”. Tidings. 11:12-13

