# FUNDAMENTALS OF PERISTOMAL SKIN CARE

It is estimated that around 100,000 people in the UK live with a stoma. One of the most common problems encountered by ostomates (people with a stoma) is sore peristomal skin (the skin surrounding the stoma). With so many ostomates, it is more than likely that a nurse will at some time or other have to care for a patient with a stoma, therefore, it is important to be able to care for and recognise potential peristomal skin problems early. The aim of this article is to look at the fundamentals in the management of peristomal skin care.

erived from the Greek word for 'mouth' or 'opening,' stoma today refers to a surgical opening onto the outside surface of the skin that has been formed to pass faeces or urine (Burch, 2010). An estimated 13,500 people in the UK undergo stoma formation surgery every year, and approximately 100,000 people in the UK live with a stoma (Royal College of Nursing, 2009; Dougherty and Lister, 2011).

There are three main types of stomas (*Table 1*): colostomy, ileostomy and urostomy. A colostomy is formed from the colon. It is most commonly used for patients who have had rectal cancer. An ileostomy is formed from either the small bowel or ileum. It is created for patients with conditions such as ulcerative colitis. A urostomy is most commonly formed from the ileum; it is most commonly used when the patient has had bladder cancer (Burch, 2010).

The output from the stoma is collected into a stoma appliance or bag that adheres to the peristomal skin (the skin surrounding the stoma). The type of appliance used is dependent on the type of stoma (Black, 2011; Jones, 2016):

- An ostomate with a colostomy would usually be issued with singleuse closed appliances that require changing when half full
- ➤ An ostomate with an ileostomy would normally be issued with a drainable bag, which again is emptied when half full. The bag is changed every 1–3 days
- An ostomate with an urostomy would be issued with an appliance that has a tap. The appliance requires emptying when half full and is changed every 1–3 days. Urostomy bags can also be connected to a night drainage bag.

The appliances can consist of either one or two pieces. A one-piece appliance comprises a pouch that is attached to an adhesive wafer (flange). When the pouch is changed, everything is removed. This is unlike two-piece appliances. A two-piece compliance consists of a flange that is attached around the stoma with a separate pouch, which is either clipped to or stuck onto the flange. With the twopiece appliance, the flange does not "There are three main types of stomas: colostomy, ileostomy and urostomy. The output from the stoma is collected into a stoma appliance or bag that adheres to the peristomal skin."

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Table 1. The types of stoma (adapted from Jones, 2016).		
Tissue type	Clinical presentation of waste materials	Location
Colostomy	Flatus and soft, formed stools	Lower left side of abdomen
		Transverse colostomy, however, is sited above the waist and can be either on the right of left side
Ileostomy	Soft faeces: 350–800 ml per 24 hours	Usually right lower side of the abdomen
Urostomy	Urine	Right-hand side of the abdomen

need to be removed every time a pouch is changed and can be left on the skin for several days. This can be an option when the ostomate has sore peristomal skin (Black ,2011; NHS Choices, 2013; Jones, 2016).

#### The skin

The skin is the largest organ in the body and one of its functions is protection. Under normal circumstances, the upper layer of the skin (the epidermis) provides the first line of defence, acting as a physical barrier between the external environment and the body. Intact epidermis prevents the entry of pathogenic organisms, minimises the absorption of harmful substances and prevents excessive water loss from the body (Voegeli, 2010). Over-hydration of the skin from prolonged exposure to faeces or urine, however, can change the normal pH of the skin, which at pH 4–5.5 is slightly acidic, to a more alkaline pH of 6–8, which can lead to conditions such as contact dermatitis, resulting in skin redness, itching and a burning sensation (Chandler, 2015). Chemical irritation from faeces or urine is recognised as the main reason for skin damage (Cronin, 2016). Peristomal skin complications are regarded as the most common complications for people living with a stoma (Martins et al, 2012).

#### Peristomal skin care

The aim of peristomal skin care is to maintain healthy skin. There should be no difference between peristomal skin and normal abdominal skin (Cronin, 2016). Healthy peristomal skin is important in order to ensure that the flange adheres properly, therefore preventing leakage. This is also important for the patient's wellbeing, as sore skin can cause pain and discomfort and impair the patient's quality of life (Burch, 2010).

As a general rule, during the postoperative period stoma care nurses train ostomates in the care of their own stoma (Burch, 2011). There will be occasions, however, when other nurses will have to care for these patients in hospital, at home or in a care home. It is important therefore that nurses know the principles of good peristomal skin care, enabling them to undertake the procedure safely themselves and also observe the ostomate carrying out the procedure. Observation is essential in order to identify and correct potential problems, such removing the appliance incorrectly or vigorously washing the peristomal skin (Burch, 2011). Peristomal skin care consists of a combination of factors, including the correct application and removal of the appliance and skin cleansing (Burch, 2011).

#### Removal of the appliance

Peristomal skin damage can occur unless the appliance is removed carefully. Inappropriate removal, such as pulling the appliance away, pulling it off too quickly, or picking at the flange edges, can lead to skin trauma (Burch, 2010; Black, 2014). To remove an appliance without causing skin trauma, the adhesive should be gently peeled off with one hand while the surrounding skin is held with the other hand (Dougherty and Lister, 2011).

If the ostomate finds removing the appliance painful, an adhesive remover may prove useful. Adhesive removers are available as sprays or wipes that help to dissolve the adhesive on the stoma appliance, reducing the risk of skin trauma when the appliance is removed (Burch, 2014).

#### Skin cleansing

Once the appliance has been removed, the preistomal skin should be cleaned gently using warm tap water and wipes. Soap has a drying effect on skin and should not be used on a regular basis. The same applies to the use of wet wipes, which should only be used occasionally, for example when the patient is out and about and requires unexpected cleaning when warm water is unavailable. There is no need to clean the stoma itself as this can lead to bleeding; however if the patient wishes to remove faeces from the stoma, this can be achieved by placing a cleaning cloth over the stoma, pressing gently and then removing it without wiping hard.

To ensure that the appliance adheres well, gently but thoroughly dry the peristomal skin (Burch, 2010). It is not always necessary to apply a barrier film; however if the skin is fragile or if the ostomate has an ileostomy that has a corrosive faecal output, a barrier film should be applied once the skin has been dried. Allow a few minutes for the film to dry before the appliance is reapplied (Burch, 2010, 2014). Always apply a barrier film according to the manufacture's instructions (Jones, 2016).

## Reapplying the appliance

When the skin is clean and dry, the appliance can be replaced. The aperture in the new appliance should be cut to the same shape as the stoma. For a round stoma use a circle; for a loop stoma an oval/egg shape may be required. The aperture will require a 2–3 mm clearance. The new appliance should then be carefully positioned around the stoma, ensuring that the adhesive flange is secure and that there are no creases in either the skin or the flange. Creases can result in leakage, which can lead to skin damage (Burch, 2010).

### Referral

As previously mentioned, the most common cause of sore peristomal skin is leakage. Ensuring that the appliance is correctly fitted as described above will help to prevent leakage. The ostomate should have been taught how to assess the size of their stoma and know how to alter the size of their aperture. The template also needs to be regularly reviewed and the ostomate should know how to do this, and should also have been told who to contact should they need to have their template resized (Burch 2011b).

During the first 6–8 weeks following a stoma formation, the size will alter due to a reduction in postoperative oedema and the fact that the stoma shrinks back. Other factors such as weight gain, weight loss and pregnancy will also affect the abdominal shape, and therefore the fitting of the stoma appliance. If there are any worries or concerns the stoma specialist nurse should be contacted as addressing these problems early will help to prevent skin damage (Burch, 2011b).

If the ostomate complains of sore skin, it is important to undertake a thorough assessment in the same manner as for any type of wound. Burch (2011) suggests that the stoma specialist nurse is the most appropriate person to undertake this assessment. This view is supported by Hanley and Adams (2015), who suggest that all peristomal skin problems should be referred to the stoma specialist nurse. It is also important to be aware that some ostomates may have preexisting skin conditions, such as eczema and psoriasis, or they may have an allergy and may therefore require a dermatology referral (Burch, 2011).

## Conclusion

With an estimated 100,000 ostomates in the UK, it is probable that nurses will have to care for an ostomate at some time. The most common reason for sore peristomal skin is leakage from an appliance that comes into contact with the peristomal skin and leads to skin breakdown. The skin has a pH of 4–5.5, and contact with urine and faeces can increase the pH, which can make the skin more vulnerable to damage. Preventing leakage and, therefore, skin contamination from effluent can help maintain a healthy peristomal skin. The correct removal and application of stoma appliances and the careful cleansing of peristomal skin are also important in peristomal skin care.

The aim of peristomal skin care is to maintain the integrity of the peristomal skin and ensure that there is no leakage from the stoma appliances. When peristomal skin becomes sore and problematic, however, it may be appropriate to refer a patient to the stoma care nurse for a thorough assessment of the situation. WE

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