What you need to know about caring for the skin around a stoma

Simply trying to cope can be a challenge for the many people in the UK who have a stoma — this can include issues such as how to clean and maintain the appliance and what to do if there is a complication once they have been discharged home into the community.

The community nurse may be the first point of contact when there are problems with a stoma in the patient’s home. This article aims to provide more information on how to change a stoma appliance as well as how to deal with issues such as skin stripping and leaking. Finally, the author considers the effect on body image and how patients might cope emotionally with having a stoma.

BACKGROUND

There are over 100,000 people in the UK with a stoma (Black, 2009). Therefore, it is common for community nurses to have a number of these patients on their caseload. It is important to have a working knowledge of the more common stoma types; the appliances that are generally used; the general frequency of bowel activity; and how the appliance is emptied (if appropriate) and changed.

Patients are generally taught how to change their stoma appliance in hospital, however, it is possible that over time they will develop a poor technique. Thus, it is essential that the community nurse knows how to advise them or to seek assistance from the stoma specialist nurse if further care is necessary.

One of the most common problems associated with a stoma is degradation of the peristomal skin, particularly skin stripping and sore skin due to leakage from the stoma appliance. This article explores the assessment and treatment of these issues, as well as touching on the effects on body image of having a stoma.

In the immediate post-discharge period, community nurses are in an ideal position to help patients adapt to their stoma.

TYPES OF STOMA

There are three main types of stoma that can be surgically formed:
- Colostomy (see Figure 1 for the different colostomy sites)
- Ileostomy
- Urostomy.

A colostomy is formed from the colon or large bowel and passes soft, formed faeces and flatus into a closed appliance (Burch, 2008) (Figure 2 shows a typical stoma pouch). The colostomy appliance is replaced between three times a day and three times a week.

An ileostomy is formed from the ileum or small bowel and passes loose faeces and flatus into a drainable appliance fastened most commonly with a Velcro-type fastening. The ileostomy appliance is changed daily or every other day and requires emptying several times a day — commonly between 4–6 times.

Finally, the urostomy is formed to divert urine via a small segment of bowel, most commonly the small bowel or ileum. Urine and a small amount of mucus from the segment of bowel are passed into a drainable appliance with a tap, which is emptied several times a day. The urostomy appliance is replaced daily, or every other day.

CHANGING THE APPLIANCE

Patients are usually taught to maintain their stoma before being discharged from hospital, but as mentioned above, over time bad habits can set in. Furthermore, Stott et al (2013) reported that about one-third of patients are not confident about stoma maintenance on discharge. However, Wu et al (2007) disagreed with this, stating that many patients did consider themselves able to care for their stoma. In an ideal world, all patients with a stoma would be
trained to be independent while in hospital (unless they are more dependent and being discharged to a nursing home, for example). However, in reality it is essential that community nurses understand how to change stoma appliances in case they need to guide those patients who do encounter post-discharge problems.

**Technique**

The adhesive part of the appliance is termed the flange, face plate or base plate and it is essential that it adheres well to the abdominal wall — this can help to reduce the risk of leakage and the skin becoming sore. Table 1 lists the correct steps for changing an appliance, however, each nurse and patient will have slight variations in their technique.

**SKIN CARE**

If appliance changes are performed regularly and to the necessary standard, the peristomal skin should remain healthy and intact. Ideally, the appearance of the peristomal skin should match the surrounding healthy skin, however, there are a number of ways that community nurses can assist patients if problems arise.

An accurate assessment is essential — this should include the cause of the skin problem; how long it has persisted for; if any treatments have been tried; the results; and what, if anything, makes the skin problem better or worse. There are a number of issues that can affect people with a stoma including skin stripping and leakage from the appliance itself.

**Skin stripping**

Skin stripping occurs when the surface layer of the skin is removed (Stephen-Haynes, 2013), particularly if the appliance is removed roughly or frequently (Burch, 2011), or if the skin is weak, perhaps as a result of aging. One method of preventing the skin from becoming sore is to retrain the patient in removal — the gentler the removal, the less chance of skin stripping.

Another method of avoiding trauma to the skin is to use an adhesive remover when taking off the appliance. These come as sprays or wipes and help to remove any adhesive residue from the skin before the appliance is separated from the skin. Research has shown that many stoma nurse specialists recommend their use in practice (Rudoni and Dennis, 2009).

In the author’s experience, another stoma accessory that can prevent skin damage as a result of skin stripping is a protective skin barrier film. These come as wipes or sprays and are used after the peristomal skin is cleaned and dried. The skin protector leaves a thin layer of barrier film, which will protect the skin from the stomal output and also from trauma as a result of the appliance being removed.

**Managing a leaking appliance**

There are many reasons why a stoma appliance might leak, for instance, if it is not securely placed around the stoma, formed faeces may leak onto the peristomal skin. Another common reason for leakage in stoma appliances is where they are applied to uneven peristomal skin. For the appliance flange to adhere to the abdominal wall it needs to be on a level surface and if there is a crease or ‘skin dip’ near the stoma this needs to be smoothed-out to provide a flat base for the flange.

There are a number of stoma accessories that can be used to achieve this, including stoma adhesive paste, strip paste or seal/washers (Black, 2013). These accessories are manufactured from a similar hydrocolloid material to the flange and are designed to be adherent. The seals and washers are available in a circular shape, which can be used around the stoma to aid adhesion of the flange to the abdominal wall. Alternatively, small parts of the seal, adhesive paste, or strip paste can be used directly in the ‘dip’ or crease in the skin to level it out — it might even be necessary to use adhesive paste in conjunction with a seal or strip paste.

Adhesive paste (Burch, 2013) comes in a tube and often contains alcohol, which can cause a stinging sensation if the skin is broken, although, in the author’s experience, only for a short period of time. Therefore, adhesive paste should be used with caution. The use of a barrier film will also prevent the alcohol from touching the skin and thus reduce or prevent the stinging sensation. However, it should be noted that adhesive paste should only be used sparingly as it takes time for the alcohol to dry and, if used excessively, the appliance itself will not be dry or be secure for a period of time.

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**Table 1: Appliance change procedure (Burch, 2013)**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Collect all the stoma equipment (clean appliance, warm tap water, cloths for cleaning and drying, rubbish bag, measuring guide, scissors, and/or stoma accessory)</td>
</tr>
<tr>
<td>2</td>
<td>Empty the appliance if it is drainable</td>
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<tr>
<td>3</td>
<td>Gently remove the old stoma appliance (possibly with the use of an adhesive remover) and dispose of it in the rubbish bag</td>
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<tr>
<td>4</td>
<td>Gently but firmly clean the skin (the peristomal skin). The skin should be checked for signs of soreness (red or broken skin)</td>
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<tr>
<td>5</td>
<td>After any faeces/urine has been removed from the skin, it should be dried</td>
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<tr>
<td>6</td>
<td>The new appliance (possibly with a stoma accessory) should now be applied to the abdominal wall. The size of the aperture in the stoma flange should be 2–3mm larger than the stoma and the same shape — this prevents the skin being damaged by stomal output</td>
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<tr>
<td>7</td>
<td>The waste should be placed in the rubbish bag and disposed of with general rubbish</td>
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**Figure 2.**

A typical colostomy pouch.
In the author’s experience, another cause of a leaking appliance can be an ileostomy or urostomy that is ‘flush’ or level with the skin’s surface; similarly, a colostomy that has retracted below the level of the abdominal surface may cause leakage. In these situations, a convex appliance or convex seal might be used. These have a dome-shaped flange instead of the normal flat flange, and this pushes into the abdominal wall around the stoma to prevent leaks from occurring. A thin elastic belt that is clipped onto the edge of the convex flange helps to hold it in place (Burch, 2013). However, community nurses need to ensure that the elastic belt is worn level with the stoma and not at waist level — if worn at waist level the belt will pull the appliance in the wrong direction; when level with the appliance, the belt will hold it securely to the patient’s abdomen. The belt can be hand-washed as necessary.

Caution must be exercised when using convex or dome-shaped flanges, however, as the pressure exerted on the skin can result in bruising and, in rare cases, pressure damage (Boyd et al, 2004). Therefore, the skin will need careful assessment by the community nurse before and after this method is used. Erwin-Toth et al (2012) considered that a patient’s quality of life could be significantly improved by managing issues such as appliance leakage, thus community nurses have an important role in assisting patients to resolve such issues.

BODY IMAGE AND LEARNING TO LIVE WITH A STOMA

Having a stoma can affect people in different ways (Grant et al, 2013) and it is commonly reported that patients often struggle with their body image following the procedure. The concept of body image includes the ‘perceived’ and the ‘actual’ body image — the latter is certainly altered with the formation of a stoma, but patients may also perceive themselves differently.

This altered body image can be expressed in a variety of ways — patients may find it hard to adjust to physical changes to the body such as loss of the anus; they might experience anger at the stoma, which can lead to them neglecting its maintenance; or they may be concerned that their clothes will become soiled and that they are in some way regressing to childhood, which can in turn lead to low self-esteem (Salter, 1992).

Other historic research by Wade (1990) and White and Hunt (1997) found that 20–25% of patients had psychological problems after their stoma formation, while later evidence highlighted feelings of depression (Krouse et al, 2009).

On a more positive note, Notter and Chalmers (2012) reported that depression does eventually resolve. This is confirmed in a review by Pachler and Wille-Jorgensen (2012), who stated that quality of life differed little between people with or without a stoma, while Pittman et al (2009) found that quality of life improved dramatically during the first few months following the procedure as patients became more accustomed to their new body image. Despite this, Ito et al (2012) noted that there may be a dip in this recovery at about two months, possibly because at that point people are physically recovered from their surgical procedure but are still adapting to life with a stoma.

Practical tips

As the healthcare professional most likely to visit patients in their recovery period, the community nurse is the person best-placed to discuss any stoma-related problems. In the author’s experience, practical tips that nurses can provide to stoma patients include:

- Physical exercise: it is generally safe to increase exercise gradually and when the patient feels strong enough
- Social life: nurses should seek to resolve any issues that might affect people’s confidence in socialising or resuming their normal life, such as ensuring that the stoma appliance does not leak and is securely adhered to the abdominal wall. Patients should be encouraged to make contact with friends and family, or resources such as stoma support groups (see box at end of article) or spiritual groups (Li et al, 2012). This will help with rehabilitation and adaptation
- Sexual relations: nurses should offer patients the chance to discuss sexual relations — it is generally possible for people to have intercourse if there is no damage to the nerves in the genital area, but the surgeon should have discussed the risks with the patient before the operation. However, in the author’s experience, practical advice around sexual relations includes ensuring that the stoma appliance is emptied before intercourse and the availability of underwear that can disguise or support a stoma appliance.

CONCLUSION

This article has shown that the community nurse can assist the patient with a stoma in a number of ways. As well as helping the patient cope emotionally with their new body image, the provision of appropriate support and advice will help patients deal with the practicalities of having a stoma, such as preventing the appliance from leaking and protecting the peristomal skin from damage.

Of course, nurses are not expected to be experts in every facet of stoma care and it may be that referral to the stoma specialist nurse for further advice on skin care or the GP for counselling may be appropriate. However, by following the advice in this article, the community nurse will be better placed to provide advice and support to the patient with a stoma.

REFERENCES

Burch J (2013) Back to basics: how to care
In order to use the knowledge you have gained from this article to inform your continuing professional development (CPD), you should take the following steps before logging onto the website (www.jcn.co.uk/learning-zone/) to take the learning zone test:

**Reflect**
Are you familiar with the different types of stoma?
Do you understand the dangers of skin stripping and stoma leakage?
Are you able to list the different types of practical support that can be offered to the stoma patient?

**Evaluate**
Do you understand the importance of regularly cleaning the stoma appliance? What can you do to ensure that the patient’s stoma does not leak? How can you help to ensure that the patient maintains a good self-image?

**Act**
Read the article when you have a spare few minutes in the day.
Make some notes on what you have learned, then visit the online test (www.jcn.co.uk/learning-zone/) to complete this subject.
The whole test, which involves reading this article and answering the online questions, should take you 90 minutes to complete.
Finally, download your certificate to show that you have completed the JCN e-learning unit on stoma care as part of your CPD portfolio.

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What’s your next step?

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**Find out more...**
To find out more about support for people with a stoma, check out the following websites:

- www.colostomyassociation.org.uk — for people with a stomal appliance
- www.iasupport.org — for people with an ileostomy or internal pouch
- www.urostomyassociation.org.uk — for people with a urostomy

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**References**

- Salter MJ (1992) What are the differences in body image between patients with a conventional stoma compared with those who have had a conventional stoma followed by a continent pouch? *J Adv Nurs* 17(7): 841–48