Supporting patients with a stoma

The word “stoma” originates from Greek, and means an opening into or out of the body. A stoma is surgically created when part of the bowel or bladder is pulled from the abdominal cavity through the abdominal wall and attached to the skin of the abdomen. The bowel or bladder contents can then be eliminated through the stoma into a removable bag (sometimes called a pouch), which is attached to the body via an adhesive flange (sometimes also called a base plate or face plate).

There are many reasons for stoma formation. Faecal stomas (colostomy and ileostomy) generally need to be made because of cancer, diverticular disease, Crohn’s disease, ulcerative colitis or as a result of an accident. Urinary stomas (urostomy or ileal conduit) are usually created because of cancer or neurogenic bladder (e.g., in spina bifida).

When a colostomy is performed part of the colon is removed (resected) or bypassed. The position of the resulting stoma will depend on whether it is created from the ascending, transverse or descending part of the colon. For example, in a descending colostomy (the most common type of colostomy), the stoma is usually on the left hand side of the abdomen compared with the rarer ascending colostomy, where the stoma will be on the right hand side. Colostomies can also be described in terms of the type of surgery that has been performed. Loop colostomies are when the stoma is made from a loop in the bowel. End colostomies are when the end of the bowel (i.e., what remains after part of the bowel has been removed) is used to make the stoma.

In the case of an ileostomy, all of the colon, rectum and anus are resected or bypassed. An end ileostomy is created from the distal end of the ileum and will, therefore, be sited on the lower right hand side of the abdomen. In contrast, a loop ileostomy can be situated anywhere along the ileum to bypass the part of the bowel that is causing problems.

Stomas can be permanent (e.g., if the end portion of the colon or rectum is diseased and requires removal) or temporary (e.g., a stoma might be created to bypass the bowel to rest it in inoperable bowel disease or injury). A temporary stoma can be reversed six to 12 weeks after the initial procedure or later, depending on the healing process.

Creation of a urostomy usually involves removal of the bladder or, rarely, bypassing it. The ureters are grafted onto a section of the ileum (approximately 12cm long), which is then used to form a stoma through which urine can drain (ileal conduit). A urostomy is commonly located on the right hand side of the lower abdomen.

Stomas usually look bright red due to a rich supply of blood vessels and can bleed when rubbed. They have no nerve endings, so there should be no pain when handling them. There will be individual differences in the shape and size of a stoma depending on the type of surgery performed and body shape.

For example, some will protrude more than others. The stool will start to firm up as the patient begins to eat solid food and, eventually, most patients will be able to resume a normal diet, which should be balanced, with meals at regular intervals.

Living with a stoma

Once patients have recovered from surgery, they can resume most normal activities. The doctor or stoma care nurse will provide advice on specific matters but pharmacists can help to reinforce lifestyle advice and to ensure appropriate use, storage and disposal of stoma appliances. Stoma bags and related items will be discussed in further detail in the second part of this article, to be published online on 19 November 2010.

Diet

People with a stoma (“ostomates”) often require dietary advice because bowel function will be affected by surgery. Immediately after a colostomy or ileostomy, the stool tends to be watery and more frequent than before, mainly because the shortening of the bowel results in less water reabsorption. Patients should, therefore, be advised to drink plenty of fluids to avoid dehydration.

The stool will start to firm up as the patient begins to eat solid food and, eventually, most patients will be able to resume a normal diet, which should be balanced, with meals at regular intervals. New foods should be gradually introduced (one at a time) in small portions. As their eating habits develop into a routine patients may be able to adjust their eating and diet to control their stoma output to suit their activities.

Certain foods can cause problems such as gas, odour, blockage, constipation or diarrhoea in some patients and Panel 1 lists some common examples. Not everyone will be affected in the same way, so patients will need to experiment to find out what is best for them.
**Learning & development**

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**Panel 1: Food Guide for Ostomates**

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<td>Brussels sprouts</td>
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<td>Onions</td>
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**Clothes**

Stoma bags are designed to fit discreetly under clothing and they can be worn underneath normal swimming costumes. However, special swimming costumes that disguise the presence of a prominent stoma can be purchased. Patient support organisations (see Signposting) can provide information on where these can be purchased.

**Sex life**

Most ostomates will be able to resume a normal sex life once they have recovered from surgery, but they may find some sexual positions uncomfortable. For comfort and peace of mind, a smaller bag or stoma cap can be used during sexual activity.

Sexual function in women is not normally affected although some may experience vaginal dryness, which a vaginal lubricant may help. Some men suffer impotence that eventually resolves but bladder removal or nerve damage can lead to permanent impotence. Nerve damage can also cause loss of sensitivity in both men and women.

Sexual problems are more likely to be related to removal of the rectum rather than the stoma itself. Wounds in this area heal slowly. In addition, nerves involved in sexual function are located around the rectum and may, rarely, be damaged during surgery. Patients who are concerned should speak to their stoma care nurse or GP.

**Sports**

Ostomates can participate in most sporting activities. However, contact sports may pose a risk of injury to the stoma and weight lifting can strain the muscles surrounding the stoma causing a hernia. Ostomates wishing to participate in such activities should first consult their GP or stoma nurse.

Ostomates who travel by aeroplane should pre-cut their flanges, because scissors are no longer allowed in hand luggage. Ostomates should also be aware that their bag can show up on full body scanners. They can obtain travel certificates that explain what an ostomy bag is from any ostomy patient association or dispensing appliance contractor.

**Medicines use**

Some medicines can affect the functioning of the stoma and vice versa. Some effects will depend on stoma type. Examples are given in Panel 2 (p518).

Pharmacists need to be aware of potential problems so they can advise ostomates appropriately both on prescription medicines or management of minor ailments. For example, most ostomates with pain, should use simple analgesics, such as paracetamol. If non-steroidal anti-inflammatory drugs are used, usual precautions, such as taking with or after food, apply. Opioid analgesics should be
avoided because they can cause constipation.

For ileostomates with a cold, management options include steam inhalation and topical nasal or oral liquid decongestants if necessary — absorption from film-coated tablets can be incomplete. Generally, liquids or uncoated tablets are preferred.

Minor ailments in ostomates include constipation (especially compacting of stools) and diarrhoea. These can be prevented by careful choice of food but when they occur they can sometimes be managed with advice and simple over-the-counter products (see Panel 3, p518). However, ileostomates with constipation should be referred to their stoma nurse or GP.

Other common problems

Pharmacists will also need to be aware of other common problems that ostomates can encounter, such as “pancaking” and ballooning.

Pancaking

“Pancaking” — where stool sits at the top of the bag in a pancake shape instead of dropping to the bottom — can affect colostomates. This prevents more stool from entering the bag, resulting in leaking beneath the flange on to the skin below and, therefore, possible skin irritation.

Pancaking can be caused by too much air being expelled from the bag through the filter, leaving no room for the stool. Most cases are caused by patients not attaching bags properly. One solution is to block the filter to prevent air escaping or to put a little lubricant (a water-based one that will not degrade the plastic of the flange, eg, Adapt lubricating deodorant) in the bag to encourage the stool to slide to the bottom.

Pancaking can also be caused by sticky faeces and increasing dietary fibre and fluid may help.

Ballooning

Filters prevent the build up of air and ballooning of the bag. However, sometimes ballooning can occur due to excess gas produced by certain foods or drugs such as antibiotics, which can allow overgrowth of bacteria that produce excess gas. It can be prevented by avoiding foods and drinks that cause gas (see Panel 1) and by chewing food slowly with a closed mouth to prevent intake of air.

Prolapse

Sometimes, the bowel can prolapse through the stoma due to weakening of the abdominal muscles surrounding it. This is more common in loop colostomies and ileostomies. The stoma will lengthen and may become enlarged but should continue to function normally and does not usually cause any pain. However, patients can find a prolapse disturbing. A stoma care nurse can show patients how to reduce a prolapse. Those who experience pain or discomfort should seek medical advice because surgery may be necessary to correct the problem.

Stenosis

In some patients the bowel can narrow (stenosis) and prevent stool passing through the stoma. This condition will usually need surgery to correct. If stenosis occurs at the stoma site, dilation using a stoma dilator may be possible, under supervision of a nurse.

Parastomal hernia

Sometimes (eg, due to forceful coughing, weight gain, weight lifting or infection at the time of surgery), abdominal wall muscles can detach from the stoma edges, allowing the bowel to protrude through the gap and creating a hernia. Support belts and garments can be used to manage this problem (which is usually painless) but complications can arise and patients should seek medical attention if they experience pain or reduced stoma output, or if they find it difficult to maintain a seal around the stoma.

Retraction

When an ostomate gains weight after surgery or becomes pregnant, the stoma can stretch and partially or completely sink below the skin surface. This can also happen due to problems when the stoma was created. For these patients, flanges and bags with built in convexity (under nurse supervision) can help to avoid leakage of faeces beneath the flange.

Urinary crystals

In urostomates, urinary crystals can form on the stoma or skin if the urine is alkaline, causing irritation and bleeding of the stoma. This can be prevented by keeping the urine acidic (eg, by drinking cranberry juice). Careful cleaning and proper fitting of the bag...
will also help to prevent crystals forming. Crystal formation can be treated with half water and half white vinegar wipes, held against the skin for a few minutes between bag changes.

**Skin problems**

In spite of good stoma hygiene, a variety of skin problems can develop. These include soreness, ulcers, bruising, dermatitis, psoriasis, eczema, granulomas and pressure sores on the peristomal area. Patients experiencing these problems will need review and referral to their stoma nurse or GP. Skin problems will generally be treated with the usual remedies, but the ostomate should always be referred for assessment to determine the cause.

**DECLARATION OF INTEREST** Jo Sica is employed by Hollister Ltd and works in the NHS as a clinical nurse specialist, stoma care.

**Signposting**

• Patient organisations and support groups include The Colostomy Association (www.colostomyassociation.org.uk), The Ileostomy and Internal Pouch Support Group (www.the-ia.org.uk), the Urostomy Association (www.urostomyassociation.org.uk) and Ostomyland (http://ostomyland.com).

A second article, to be published on **PJ Online** on 19 November 2010, will discuss stoma appliances and accessories and related pharmacy services. It will also contain practice points, resources and references. “Check your learning” will be made available when this article is published.

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