Cancer Association of South Africa (CANSA)

CANSA Fact Sheet
on
Stoma and Stoma Care

Introduction

A stoma, from Greek στόμα ("mouth") is an opening, either natural or surgically created, which connects a portion of the body cavity to the outside environment. Surgical procedures in which stomata are created are ended in the suffix *-ostomy* and begin with a prefix denoting the organ or area being operated on.

In anatomy, a natural stoma is any opening in the body, such as the mouth. Any hollow organ can be manipulated into an artificial stoma as necessary. This includes the oesophagus, stomach, ileum, colon, pleural cavity, ureters, urinary bladder, and kidney pelvis.

[Picture Credit: Stoma]

One well-known form of an artificial stoma is a colostomy, which is a surgically created opening in the large intestine that allows the removal of faeces out of the body, bypassing the rectum, to drain into a pouch or other collection device. The historical practice of trepanation (trephining or making a burr hole) was also a type of stoma.

Examples of Major Stoma Types

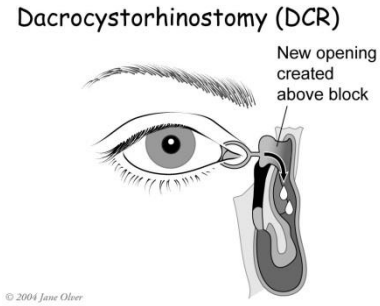
For some stoma, for example colostomy or ileostomy patients, the stoma may be temporary allowing the bowel to heal before the stoma is reversed or it may be permanent. The length of time before reversal varies but most stomas are not reversed before three months

Examples of the most important stoma types include:

Researched and Authored by Prof Michael C Herbst
[D Litt et Phil (Health Studies); D N Ed; M Art et Scien; B A Cur; Dip Occupational Health; Dip Genetic Counselling; Diagnostic Radiographer; Dip Audiometry and Noise Measurement]
Approved by Ms Elize Joubert, Chief Executive Officer [BA Social Work (cum laude); MA Social Work]

Dacryocystorhinostomy

Epiphora, or abnormal tearing, occurs because of blockage in the lacrimal drainage system, which impairs normal tear channelling into the nose. Recurrent infection may also occur as a result of the stagnation. The dacryocystorhinostomy operation, which involves fistulisation of the lacrimal sac into the nasal cavity, may alleviate the symptoms. The operative approach to the sac may be external or endoscopic. The latter approach may use rigid telescopes or the microscope.



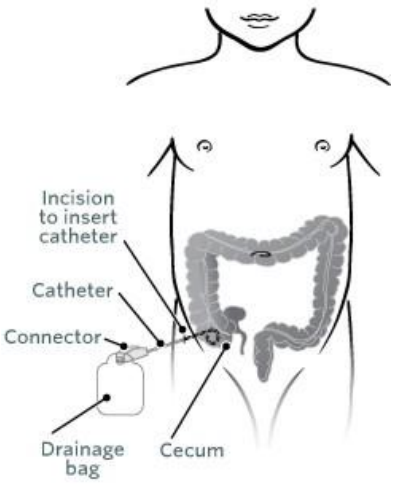
Caecostomy

A surgical procedure that is used to clear the bowels of faecal matter. It is typically used for children with faecal incontinence related to severe disorders. Faecal incontinence is the inability to control your bowels, which can involve symptoms ranging from severe constipation to having a bowel movement at an unexpected or embarrassing time.

Children with faecal incontinence often have severe constipation. In some cases, liquid faecal matter bypasses the solid faecal matter and leaks out, which can cause embarrassment and frustration for the child.

Caecostomy differs slightly from the traditional enema that is used to relieve constipation. An irrigation is performed directly through the ostomy to promote the release of faecal matter. A caecostomy is also known as an 'antegrade enema'.

[Picture Credit: Caecostomy]

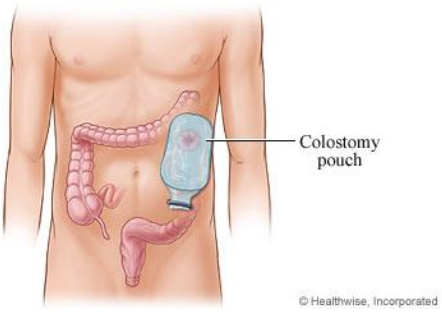


In the caecostomy, a tube (catheter) is used for the procedure. This catheter is inserted into the cecum, which is the first portion of the bowel, or large intestines. The cecum is located in the lower right abdomen. Liquid medication is injected into the cecum through this tube, which helps coax the faecal matter out of the body through the rectum

Colostomy

Refers to a surgical procedure in which an opening (stoma) is formed by drawing the healthy end of the large intestine or colon through an incision in the anterior abdominal wall and suturing it into place.

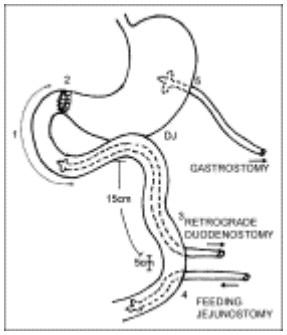
[Picture Credit: Colostomy]



When the colon, rectum, or anus is unable to function normally because of disease or injury, or needs to rest from normal function, the body must have another way to eliminate the waste. A colostomy is an opening - called a stoma - that connects the colon to the surface of the abdomen. This provides a new path for waste material and gas to leave the body. A colostomy can be permanent or temporary.

Duodenostomy

Refers to a stoma or surgical opening that is constructed by bringing the end or loop of small intestine (the duodenum) out onto the surface of the skin and to the surgical procedure which creates this opening. Intestinal waste passes out of the duodenostomy and is collected in an artificial external pouching system which is adhered to the skin.



[Picture Credit: Dudodenostomy]

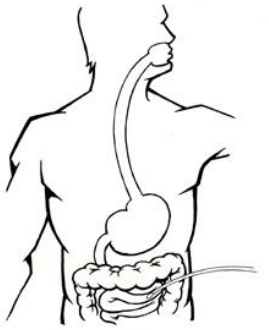
Ileostomy

refers to a stoma (surgical opening) constructed by bringing the end or loop of small intestine (the ileum) out onto the surface of the skin and to the surgical procedure which creates this opening. Intestinal waste passes out of the ileostomy and is collected in an artificial external pouching system which is adhered to the skin. Ileostomies are usually sited above the groin on the right hand side of the abdomen.

[Picture Credit: Ileostomy]

Jejunostomy

A surgical procedure to create an opening into the jejunum. It is a surgical procedure by which a tube is situated in the lumen of the proximal jejunum, primarily to administer nutrition. There are many techniques used for jejunostomy: longitudinal Witzel, transverse Witzel, open gastrojejunostomy, needle catheter technique, percutaneous endoscopy, and laparoscopy.



[Picture Credit: Jejunostomy]

The principal indication for a jejunostomy is as an additional procedure during major surgery of the upper digestive tract, where irrespective of the pathology or surgical procedures of the oesophagus, stomach, duodenum, pancreas, liver, and biliary tracts, nutrition can be infused at the level of the jejunum. It is also used in laparotomy patients in whom a complicated postoperatory recovery is expected, those with a prolonged fasting period, those in a hypercatabolic state, or those who will subsequently need chemotherapy or radiotherapy. As a sole procedure it is advised for neurologic and congenital illnesses, in geriatric patients who pose difficult care demands, and for patients with tumours of the head and neck. The complications seen with jejunostomy can be mechanical, infectious, gastrointestinal, or metabolic.
(Tapia, *et al*.).

Appendicostomy

An appendicostomy is also called a Malone procedure (MACE). This is done for children who need a daily enema to stay free from stool accidents. This is part of their bowel management program. The Malone procedure allows the enema to be given at the beginning of the colon (appendix), instead of being flushed up through the rectum. This procedure will allow your child the ability to give himself daily enemas in private.

Picture 1 Receiving an enema through the appendicostomy, or Malone.

The surgeon connects the appendix to the umbilicus (belly button) or right corner of the abdomen (belly). A one-way valve is created inside your child's belly. This lets the enema tube (catheter) go in, but no stool or body fluids will be able to come out. The valve is hidden on the inside. No artificial device is used.

The surgeon creates the valve with your child's natural tissues and skin. The enema catheter can be inserted through this valve. The solution can be flushed through the new valve the same as a rectal enema.

Oesophagostomy

An oesophagostomy tube is a small rubber tube that enters the oesophagus through the skin of the neck. It goes into the oesophagus so that food can be delivered to the stomach. The oesophagus, or gullet, is the muscular tube which transports food from the mouth to the stomach. The oesophagostomy tube does not go into the stomach because of complications that can arise. It enters the oesophagus so that food can be delivered to the stomach bypassing the mouth and pharynx.

[Picture Credit: Oesophagostomy]

Gastrostomy

Gastrostomy feeding tube insertion is done in part using a procedure called endoscopy. This is a way of looking inside the body using a flexible tube with a small camera on the end of it. The endoscope is inserted through the mouth and down the oesophagus, which leads to the stomach.

After the endoscopy tube is inserted, the skin over the left side of belly (abdomen) area is cleaned and numbed. The doctor makes a small surgical cut in this area and inserts a small, flexible, hollow tube into the stomach. The tube has a balloon or special tip The doctor uses stitches to close the stomach around the tube.

[Picture Credit: Gastrostomy]

Gastrostomy feeding tubes are put in for different reasons. They may be needed for a short period of time or permanently. This procedure may be recommended for:

- Babies with birth defects of the mouth, oesophagus, or stomach (for example, oesophageal atresiaor tracheal oesophageal fistula)
- Persons who cannot swallow correctly
- Persons who cannot take enough food by mouth to stay healthy
- Persons who often breathe in food when eating

Cholecystostomy

Formation of an opening through the abdominal wall into the gallbladder, usually done for drainage and to remove gallstones.

[Picture Credit: Cholecystostomy]

Tracheostomy

Tracheotomy is a surgical procedure which consists of making an incision on the anterior aspect of the neck and opening a direct airway through an incision in the trachea (windpipe). The resulting stoma (hole), or tracheostomy, can serve independently as an airway or as a site for a tracheostomy tube to be inserted; this tube allows a person to breathe without the use of his or her nose or mouth.

[Picture Credit: Tracheostomy]

Both surgical and percutaneous techniques are widely used in current surgical practice. It is among the oldest described procedures.

Urostomy

A urostomy is a surgical procedure that creates a stoma (artificial opening) for the urinary system. A urostomy is made to avail for urinary diversion in cases where drainage of urine through the bladder and urethra is not possible, e.g. after extensive surgery or in case of obstruction.

[Picture Credit: Urostomy]

Reasons for Creating a Stoma

There are a number of reasons that may necessitate the formation of a stoma. These include:

- Trauma

- Pelvic Cancers
    - Cancers in the pelvis can result in the patient requiring a stoma
    - Colorectal cancer – this is a very common cancer in men and women
    - Bladder cancer – it is related to certain environmental factors, e.g. certain industrial chemicals and smoking
    - Other pelvic cancers – to obtain a potential cure for someone with a pelvic cancer, including that of the prostate, uterus and cervix, it may be necessary to remove adjacent organs because of the close proximity of the pelvic organs in both males and females. This surgery can result in the patient requiring both a urostomy and a colostomy or ileostomy
    - Familial adenomatous polyposis (FAP) – this is a clearly defined pre-cancerous disease. It is an autosomal dominant disease, the main characteristics of which are multiple colonic polyps.

- Diverticular disease – this results in the formation of herniations of the mucosa into the muscle layer of the colon. It is thought that sigmoid diverticular disease is the consequence of a deficiency in vegetable fibre in the diet

    - Acute diverticulitis
    - A fistula – for example, rectovaginal or rectovesicule (between the rectum and the bladder)
    - Abscess formation
    - Haemorrhage
    - Obstruction

- Incontinence – faecal incontinence is socially disabling. The ability to retain faeces in the rectum depends on a number of factors:

    - Stool consistency
    - The capacity and compliance of the rectum
    - A normal recto-anal refle
    - Normal internal and external sphincter function
    - Normal sensation in the anal canal

- Ulcerative colitis

- Crohn's disease

Correct Placement of the Stoma

Stoma site selection and marking should be done for all patients scheduled for ostomy surgery by an experienced, educated, competent clinician or ostomy nurse. This should be considered even if there is only a possibility for stoma creation.

For a pouch to fit comfortably and securely, it is important to have an adequate, intact skin surface. Proper placement helps prevent skin and stoma complications, pouching problems, pain and clothing concerns.

The optimal site enhances the likelihood of independence in stoma care and resumption of normal activities.

The preoperative visit also provides an opportunity for education for the patient and his/her family.

Desirable Stoma Locations

1. Ileostomy or urostomy (e.g. ileal conduit)
2. Sigmoid/descending colostomy
3. Transverse colostomy

Internal and external oblique muscle group

Rectus abdominal muscle

Umbilicus

[Picture Credit: Torso]

Ideal Stoma Characteristics

- Red
- Round
- Raised (about 2½cm protrusion)
- Lumen at centre of stoma
- Smooth skin surface

Sites to avoid

- Scars and wrinkles
- Skin folds/creases
- Bony prominence
- Under pendulous breasts
- Suture lines
- Umbilicus
- Belt/waistline
- Hernia
- Mobile abdominal tissue
- Radiation sites

Other Considerations

- Type of ostomy
- Occupation of patient
- Impairments (e.g. visual, physical)
- Sports/activity level
- Prosthetic equipment
- Preference (surgeon or patient)
- Posture
- Contractures
- Diagnosis
- Age

Positions

Evaluate potential site of ostomy in lying, sitting, bending and standing positions.




Preoperative Assessments to Select Correct Stoma Site

The following assessments should be made preoperatively:

Type of stoma anticipated – the abdomen can be divided into four quadrants. Correlating this topographical information to be underlying anatomical structures will help locate the correct quadrant for the stoma. For example, an ileostomy (ileum) would usually be located in the right lower quadrant.

The rectus muscle sheath – placement in the rectus muscle can help prevent some stomal complications. This muscle runs vertically through the abdomen (refer to diagram) and may be located by inspection and/or palpation.

Adequate surface area – the pouching system is secured by adhesives. There needs to be an adequate adhesive contact surface between the pouch and the skin for secure attachment. Generally an area of five to eight (5 to 8) centimetres of flat surface is preferred but not always possible. On a child, a smaller area is needed and dependent on body size. A stoma siting disc can be used to evaluate adequate skin surface area preoperatively.

Easily seen – it is difficult for a person to be independent in their ostomy care if they cannot see their stoma. Select a site visible to the patient and if possible, below the belt line to conceal the pouch. For many people, the best location is in the lower quadrant on the apex of the skin surface. If the patient is extremely obese, place the mark in upper quadrant.

Smooth skin surface – locating the stoma in an area where the skin is flat is important. The prospective stoma site should be located away from skin folds, bony prominence, scars, the umbilicus, incision lines and the belt line. Any of these can interfere with a secure pouch seal. The abdomen should be observed in various positions.

Marking the Stoma Site

After the site is selected, it needs to be marked. The technique used for marking the site varies and may be based on specific hospital protocols. The site location should be documented and communicated to the surgeon so that the intent of the mark is understood in the operating room. An indelible marker or skin dye may be used to identify the site but must be visible after the surgical scrub. In some cases, two choices may be made with the first labelled as #1. Preoperative site markings are a guide. The final site selection is usually done by the surgeon once the abdominal cavity is entered and the condition of the bowel is determined.

Selecting the Stoma Type

There are several factors that should be considered when selecting which type of stoma should be created for a particular patient and condition. These include the indication for the stoma (faecal diversion, intestinal decompression), the site of intestinal pathology, available stoma sites, patient body habitus (obesity), complications related to specific stoma configurations, ease of caring for the stoma, and difficulty of subsequent stoma reversal.

Stomas are created to provide faecal diversion away from diseased bowel, or to decompress obstructed bowel. An end stoma provides complete faecal diversion, but does not allow for distal bowel decompression. Therefore, in cases where the distal bowel is obstructed and must be decompressed, a loop stoma or defunctioned loop stoma is an excellent option. If an end stoma is created, a mucus fistula must also be created.

The site of intestinal pathology often dictates the choice between an ileostomy and colostomy. However, in cases where a choice exists, factors such as ease in management and stoma complications may affect the choice of stoma type. Ileostomy patients are more prone to metabolic problems such as chronic dehydration, electrolyte imbalances, cholelithiasis, and nephrolithiasis. This is an even greater concern in patients with short bowel due to prior resection and patients receiving chemotherapy. In these cases, a colostomy is a better option if available.

It is generally easier to care for an ileostomy than a colostomy. An ileostomy requires more frequent appliance changes than a colostomy, and the odour of the ileostomy effluent is much less offensive from a colostomy. Ileostomy effluent is also more caustic to a patient's skin. Colostomies are also more prone to prolapse than ileostomies, especially transverse loop colostomies. Although colostomies have several disadvantages in caring for them, colostomy irrigation can eliminate the output from the stoma for as much as 24 to 48 hours. During this period, the patient may elect to cover the colostomy with a gauze dressing rather than wear an appliance, which will require emptying several times each day.

Loop stomas have several advantages over end stomas. The circulation to the stoma is preserved with a loop stoma, but may be inadequate with an end stoma. This may be crucial in obese patients in which a long and tight passage to skin level may compromise the circulation of an end stoma further.

Loop stomas are easier to close than end stomas. The proximal and distal bowel limbs are in the same aperture, allowing the stoma to be closed with a local circumstomal incision.

Creation of a loop stoma also minimizes the potential for opening the wrong end of the bowel, which can happen with an end stoma. An end stoma will often require a laparotomy to bring the proximal and distal bowel limbs together. The advantages of an end stoma include complete faecal diversion and protection from anastomotic leakage. Properly constructed loop stomas can be fully diverting, but only in the absence of stoma retraction or prolapse. Unfortunately, these complications cannot always be avoided.

Although many stomas are intended to be temporary, nearly half of all stomas are not reversed. Therefore, it is important to create the most appropriate stoma with the fewest complications and difficulties in management to optimise patient satisfaction and quality of life (Brand & Dujovny).

Pre-operative Care

Preoperative counselling and stoma site selection are critical components of preparing a patient for an operation in which a stoma may be necessary. When discussing the operation with the patient, the need for an ostomy should be emphasised.

For elective operations, it is very important that the patient receive preoperative counselling about living with a stoma. This should include a visit with an ostomy trained nurse. This will help prepare the patient psychologically and emotionally. The goal of the meeting is to reinforce the information given by the surgeon and provide real-life experiences of patients with a stoma.

Most patients are anxious about obtaining a stoma and this visit should help alleviate the patient's concerns. The concept of a stoma is unnatural to most patients and having one affects their self-image. Patients may have concerns about hygiene, fuelled by bad experiences they may have encountered with family or friends who have had a poorly functioning stoma.

Other patients may worry about limitation in social or athletic activities, or elimination of intimate relationships due to the presence of the stoma. Most patients can be reassured and made more comfortable with the concept of a stoma if the surgeon spends extra time discussing this.

It is important to relate to the patient the benefit of a stoma. It may be life-saving, protective from severe infection, or significantly improve quality of life in most patients with disordered bowel function (colitis, incontinence).

When quality of life is expected to improve, it is helpful to make the patient aware that the stoma will take control of his or her symptoms, and the patient only has to take control of the stoma to regain his or her lifestyle.

Preoperative discussions can also help the patient become acquainted with appliances and the ease of stoma care. The patient should receive a pamphlet regarding ostomies and see a picture of a stoma to clarify expectations. If possible, the patient should meet with an ostomate – an ostomate is a person who already has a stoma. This will allow the patient to ask questions from an individual who has already undergone the surgery and is living a full life with a stoma.

Moreover, issues such as odour, leakage, diet, clothing, and sexuality should also be addressed whether or not the patient brings them up. Ideally, meeting with an enterostomal therapist or stoma nurse will help assure the patient that specialists are available to aid the patient with his or her needs well after the surgery is completed.

Most difficulties with stomas occur due to incorrect placement. This can be eliminated with proper preoperative planning, which includes the surgeon, enterostomal therapist or ostomy nurse, and patient. Correct stoma placement and creation increases the ability to care for the stoma and maintain a secure pouch without leakage for approximately one week. Improperly located stomas lead to leakage of stool, peristomal skin inflammation and excoriation, emotional stress, and increased cost. For temporary stomas, these problems may be managed by early closure. However, permanent stomas may need to be revised or relocated.
(Brand & Dujovny).

Basic Post-operative Care

- The stoma care nurse:
- provides a private, safe and confidential environment
- guides the patient in selecting an appropriate appliance/equipment
- ensures a record is kept of the selected appliance/equipment
- provides ongoing review of the selected appliance
- assesses the patient's needs and plans a teaching programme in agreement with the patient/carer
- teaches the practical skills and reinforces the teaching given by the use of additional written and verbal information
- evaluates the teaching programme and the progress of the patient/carer
- discusses relevant lifestyle issues with patient/carer
- provides ongoing psychological support
- liaises with other members of the health care team
- records progress in patient's health care records

Features of a healthy stoma

When inspecting a stoma the presence of the following indicates a healthy stoma:

- Stoma should be above the skin level.
- Red and moist stoma (pallor may suggest anaemia (insufficient blood supply); dark hue may represent ischaemia (tissue death due to shortage of blood supply).
- No separation between the mucocutaneous edge and the skin.
- No evidence of erythema, rash, ulceration or inflammation in the surrounding skin.

Stoma Care Under Special Circumstances

Before any strenuous exercise is taken up – whether one is an ostomist or not – it is wise to build up a level of fitness gradually.

Caps are available that will block off certain stomata for patients during sporting activities. A stoma guard (a hard plastic shield) may give you added protection if you are participating in more strenuous sport

Swimming

Before going to a public swimming pool, one should try on the swimming costume at home and give oneself a thorough inspection in the mirror. Also, get into the bath to see what it looks like when the costume is wet and clinging to one's body. Only by seeing what others will see, can one be wholly confident to go swimming.

Modern appliances are totally water tight and will even strengthen their grip in water.

Many believe that there will be a pull on the stoma and bag on impact with the water. The appliances are usually extremely secure, especially if worn with drawstring trunks, rightly fitted around the waist. The chance of the bag showing or coming off, even when wearing a two-piece bag, is highly unlikely.

If one is embarrassed getting changed in front of other people, try wearing along shirt which will cover most of the body while getting changed. Even just draping a towel over one's shoulder will keep the stoma from view. If still concerned, get changed at home and wear a track suit over the costume.

Contact and Team Sports

Try wearing a reasonably, but not too tight fitting girdle or waistband to keep the pouch in place. It is also suggested to wear body stocking, girdles or lycra high-waisted and tight-fitting shorts.

If a lot of running is involved, rubbing or chafing around the stoma may occur. This is inevitable when a single movement is repeated. Little red marks, like mouth ulcers, might appear on the stoma, but these are nothing to worry about as they will disappear in time and health very quickly. Provided that the appliance size fits properly and it is not too long, the pouch itself should not touch or rub against the skin. Material covers are available for comfort and can soak up perspiration during the game, but they are by no means essential.

It is important that before and after each game to drink plenty of water to ensure to remain adequately hydrated.

Stomas and travelling

Wind can become worse for patients when they travel in aircraft. The change in pressure within the cabin can lead to large amounts of wind being passed. This can be exacerbated by drinking fizzy drinks and beer.

Common Problems with Ostomies

Psychological aspects

- Having a stoma is a major event and patients can become very anxious and depressed. Adequate counselling is vital and this may need to include mental health specialists. Thus, good preparation with visual aids (e.g., pictures and written information) is crucial. Introducing potential patients to those who have already undergone the procedure is a valuable method. Videos based on patient experiences have proved effective.
- Quality of life can deteriorate for patients following stoma procedure. The first few weeks post-stoma are the most vital. Patients may also have difficulty managing their stoma around their life – e.g., going out shopping and needing to change the stoma bag without adequate facilities. This can add to a low mood. Supportive family and friends are essential and may help in situations like this.
- Stoma bags will also have an impact on body image and intimate relationships may suffer. It is good practice, therefore, to enquire about work and psychosocial aspects with patients.
- During the first few weeks following the formation of a colostomy or ileostomy, patients may experience sudden urges to defecate. This is known as the 'phantom rectum' and can be very distressing for patients. Reassurance and support are helpful.

Changes in faeces

- There may be changes to the amount and consistency of faeces. With ileostomies, faeces are produced about four hours after a main meal, whereas with a colostomy, faeces are produced the following morning. Ileostomies are associated with increased output. Often patients have to change their diet to control wind and malodour – e.g., that caused by fizzy drinks and fish respectively. Flatus filters are also available.
- Leakage of the contents of the stoma bag can occur and can make patients very distressed. Recurrent leakage can lead to skin inflammation from contact.
- Stomas and skin problems
- The skin at the site of the stoma can become erythematous and fissured or can develop an allergic reaction to the materials used in stoma equipment.
- Various seals are available which cover and protect the opening. Similarly, hypoallergenic products are available for use in patients with stomas – e.g., lotions and cleansing wipes.

Stomas and dehydration

- Ileostomies usually have a very high output and thus there is a risk of dehydration. Patients need to have a good intake of fluid and take an extra 1 litre above the usual. (However, fizzy drinks and beer should be avoided as these may cause flatulence.)

Bleeding from the stoma

- It is common for there to be some bleeding from the stoma site following bag changes. This simply requires reassurance.
- Bleeding needs to be distinguished from luminal bleeding which may represent underlying disease – e.g., flare-up of inflammatory bowel disease.
- A more rare cause of bleeding is portal hypertension in patients with liver disease They may have dilatation of cutaneous veins around the stoma site.

Stoma exit-related problems

- This includes prolapse, narrowing or blockage of the stoma. Stenosis presents with ribbon-like stools and excessive high-pitched wind. These conditions require surgical correction.
- The mucocutaneous junction may become detached - partially or fully. Simple good wound care should lead to reattachment.
- Patients can also develop parastomal hernias - usually years later. Hernias can be managed conservatively to begin with, followed by surgery if resolution is not achieved.

How to Prevent Colostomy Bag 'Ballooning'

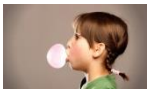
Ostomy bag ballooning is one of the few, but surmountable, colostomy pouch problems many ostomates will encounter if they do not take note of what they ingest. It is a condition that every ostomate must learn to cope with, manage, and accept as something that occurs in their daily life.
As one gets more and more used to wearing an appliance and take one's colostomy bag care seriously, controlling and managing incidences such as bag ballooning becomes much easier to control and will soon become 'second nature'.

How Ostomy Bag Ballooning Happens - Colostomy bag gas problems like ballooning occurs when there is a gradual build-up and accumulation of gas (flatulence) passed out through the stoma into the colostomy pouch, filling it up gradually until it bulges out through clothing like a balloon attached to the abdomen.

What this basically means is that once the stoma lets out air into the bag it fills it up with no means of escape. If this air is not let out through the bags filter or at the base, if a drainable colostomy bag, the stoma may ache slightly from the pressure build-up.

What Causes Colostomy Bag 'Ballooning' – one gets excessive gas build up which leads to a bloated bag if one:

- swallow airs - something that occurs when smoking
- chews tobacco
- chews gum excessively
- munches or chews continuously
- eats rapidly or swallows large pieces of food that has not been chewed properly
- follows a diet of foods that gives one gas


Foods and Drinks That Cause Stoma Bag Problems

The following foods will cause gas build-up and will result in frequent bag 'ballooning':

Foods:

- Nuts
- Cabbages
- Onions and garlic
- Cauliflower
- Asparagus
- Soy products
- Beans
- Cucumbers
- Radishes
- Brussels sprouts












Drinks:

- Carbonated and other fizzy drinks
- Sparkling wines
- Champagne
- Dairy products such as milk, cheese or yoghurt



If for any reason, any of these foods and drinks have to be consumed, one should take them in moderation or sparingly. Also, take only one of them at a time – a sure means to determine exactly which foods should be limited or avoided. If one has to go out to an event, such foods and drinks must not be consumed for at least 24 hours before the outing.

And for those who have to go to work, following a simple colostomy diet is essential, and gas emitting foods or drinks can be left as weekend treats when one stays at home.

An important thing to note is to chew food more carefully and eat more slowly so as not to take unnecessary gulps of air which will cause gas build-up.

Most times when the ostomy bag balloons out there is no need to change it. All that may be required is 'releasing' the gas build up privately in the toilet or bathroom.

Modern colostomy bags have a small pinhole opening that is linked to a thin disk of charcoal filter. This hole is normally covered with little stoma bag filter covers. These covers can be lifted to expel the air and release the gas. The gas passes through the charcoal filter without odour.

If one is living with a colostomy and prefers to wear drainable bags, one can release gas through the same opening whereby the waste is emptied. This may be a bit tricky, but it is still easy to do nonetheless. The only disadvantage of emptying gas from an ostomy bag which is ballooning this way is the odour that emanates from it.

In this instance, colostomy deodorants which are an essential ostomy product must be readily at hand. Because ostomy deodorants help reduce the offensive odour, it is advisable to always carry around a small canister.

It is pertinent to note that one's colostomy bag must never get more than two thirds filled with stool, neither must it become over half filled with gas (flatulence).

Medical Disclaimer

This Fact Sheet is intended to provide general information only and, as such, should not be considered as a substitute for advice, medically or otherwise, covering any specific situation. Users should seek appropriate advice before taking or refraining from taking any action in reliance on any information contained in this Fact Sheet. So far as permissible by law, the Cancer Association of South Africa (CANSA) does not accept any liability to any person (or his/her dependants/estate/heirs) relating to the use of any information contained in this Fact Sheet.

Whilst CANSA has taken every precaution in compiling this Fact Sheet, neither it, nor any contributor(s) to this Fact Sheet can be held responsible for any action (or the lack thereof) taken by any person or organisation wherever they shall be based, as a result, direct or otherwise, of information contained in, or accessed through, this Fact Sheet.

Sources and References Consulted or Utilised

Brand, M.I. & Dujovny, N. 2008. Preoperative considerations and creation of normal ostomies. Clin Colon Rectal Surg. Feb: 21(1):5-16. Doi: 10.1055/s-2008-1055316.

Caecostomy
http://www.lookfordiagnosis.com/mesh_info.php?term=Cecostomy&lang=1

Cholecystostomy
http://crosswords911.com/cholecystotomy.html

Clinimed
http://www.clinimed.co.uk/Stoma-Care/Stoma-Types.aspx

Colostomy
https://myhealth.alberta.ca/health/aftercareinformation/pages/conditions.aspx?hwid=ud1228

Colostomy Association
http://www.colostomyassociation.org.uk/index.php?p=144&pp=3&i=90&page=Sport%2520and%2520Exercise

Dacryocystorhinostomy
http://www.oculoplastics.co.uk/dacryocystorhinostomy_overview.php

Duodenostomy
http://www.americanjournalofsurgery.com/article/S0002-9610(09)00003-8/abstract

Encyclopedia.com
http://www.encyclopedia.com/doc/1O62-duodenostomy.html

Gastrostomy
https://www.google.co.za/search?q=gastrostomy&espv=2&biw=1517&bih=714&source=lnms&tbm=isch&sa=X&ei=bt1iVe7TH8OY7gapu4CgAg&ved=0CAYQ_AUoAQ&dpr=0.9#imgrc=odogQkRcOrX-cM%253A%3BOJt5hJJ74AAyZM%3Bhttp%253A%252F%252Fwww.tracheykids.co.nz%252FPowergallery%252Fimages%252F5%252Fkayla2_782p.jpg%3Bhttp%253A%252F%252Fwww.tracheykids.co.nz%252FgalleryGastrostomy.php%3B641%3B481

Hollister
https://www.hollister.com/brazil/files/care_tips/tips_Stoma%20Site%20Selection.pdf
http://www.hollister.com/uk/ostomy/resource/sports.html

Hubpages
http://hubpages.com/health/colostomy-care-ostomy-bags-ballooning-colostomy-bag-care

Ileostomy
http://www.drugs.com/cg/ileostomy-closure-aftercare-instructions.html

Jejunostomy
http://www.getdomainvids.com/keyword/jejunostomy%20tube/

MedlinePlus
http://www.nlm.nih.gov/medlineplus/ency/article/007378.htm
http://www.nlm.nih.gov/medlineplus/ency/article/002937.htm

Mondofacto
http://www.mondofacto.com/facts/dictionary?oesophagostomy

Nationwide Children's.com
http://www.nationwidechildrens.org/appendicostomy

Nursing Times
http://www.nursingtimes.net/an-introducdtion-to-stomas-reaons-for-their-formation/203751.article

Oesophagostomy
https://www.google.co.za/search?q=Oesophagostomy&espv=2&biw=1517&bih=714&source=lnms&tbm=isch&sa=X&ei=jtdiVf-_HofD7ga6-oCgAQ&ved=0CAYQ_AUoAQ&dpr=0.9#tbm=isch&q=Oesophagostomy+human&imgdii=-8dj8UkYi9hb9M%3A%3B-8dj8UkYi9hb9M%3A%3BsPibw0bTx8KrKM%3A&imgrc=-8dj8UkYi9hb9M%253A%3BcdIH2WFNqbq__M%3Bhttp%253A%252F%252Fimg.medscape.com%252Fpi%252Femed%252Fckb%252Ftrauma%252F432648-1364847-433306-1507867.jpg%3Bhttp%253A%252F%252Fmisc.medscape.com%252Fpi%252Fiphone%252Fmedscapeapp%252Fhtml%252FA433306-business.html%3B660%3B495

Patient.co.uk
http://www.patient.co.uk/doctor/stoma-care

Royal College of Nursing
http://www.securicaremedical.co.uk/Portals/38/docs/Clinical%20Nursing%20Standards.pdf

Stoma
http://www.ostomyland.com/ostomyland/2014/07/09/many-faces-humble-stoma/
http://www.stomawise.co.uk/lifestyle/ostobear

Tapia, J., Murguia, R., Garcia, G. de Los Monteros, P.E. & Oñate, E. 1999. Jejunostomy: techniques, indications, and complications. *World J Surg*, Jun, 23(6):596-602.

Torso
http://pixshark.com/torso-muscles-anatomy.htm

Tracheostomy
http://downloads.lww.com/wolterskluwer_vitalstream_com/sample-content/9780781788786_Craven/samples/mod09/topic7a/text.html

Urostomy
http://www.differencebetween.net/science/health/differences-between-nephrostomy-and-urostomy/

WebMD
http://www.webmd.com/colorectal-cancer/guide/living-colostomy

Wikipedia
http://en.wikipedia.org/wiki/Stoma_%28medicine%29

Wound Ostomy & Continence Nurse Society
http://www.ostomy.org/uploaded/files/ostomy_info/wocn_preoperative_stoma_marking.pdf?direct=1