NZNOCSTN

Stomal Therapy National Clinical Guidelines

NEW ZEALAND NURSES ORGANISATION | TŌPŪTANGA TAPUHI KAITIAKI O AOTEAROA

Contents

Introduction

The following guidelines were developed to assist the Registered Nurse and/or Stoma Nurse in caring for a patient with a stoma and are therefore not binding to the Nurse or their employer. They constitute neither liability nor discharge from liability. While every effort has been made to ensure accuracy of information provided, the New Zealand Nurses Organisation College of Stomal Therapy (NZNOCSTN) does not give any guarantee of the information contained within these guidelines or accept any liability with respect to injury, expense, damage or loss arising from omission or errors contained within the content of these following guidelines.

The key objective for the NZNOCSTN is to promote the art and science of Stomal Therapy in New Zealand, aiming to improve facilities and opportunities for nurses to further their skills in Specialist Stomal Therapy. These guidelines are designed to provide nationally consistent guidance for Registered Nurses and/or Stoma Nurses in New Zealand. Promoting continuity of quality care and ensuring advice and clinical management of people with a stoma is up-to-date and evidence based. This results in the overall improvement of health outcomes for this population.

These guidelines were developed through a process of consultation and peer review with expert Clinical Nurse Specialists in Stomal Therapy and the NZNOCSTN before being circulated to all stakeholders for endorsement.

These guidelines should be read alongside the NZNOCSTN Knowledge and Skills Framework, 2021.

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Introduction

Currently, there is a paucity of research in Stomal Therapy Nursing. Practice is primarily guided by case studies or expert opinion, with little documented evidence of best practice from the higher research levels generally accepted as evidence. For the most part, the level of evidence for these guidelines reflects the expert opinions of NZNOCSTN and global stomal therapy nurse organisations, Australian Association of Stomal Therapy Nurses and Association of Stoma Care Nurses UK. All assessments and treatments covered in these guidelines should be attended in a private, confidential,and safe environment for the patient. Patient consent must be obtained before any procedure, with all usual nursing practices attended such as, handwashing and documentation, complying with local policies and procedures.

The NZNOCSTN are committed to honoring our obligations under Te Tiriti o Waitangi. We recognise continued issues within the health system including funding inequities, institutional racism and structural barriers impact whānau, hapū, and iwi accessing health and wellbeing services. All Nursing practises should be conducted in a manner that the person with a stoma determines as culturally safe, incorporating manaakitanga with Māori patients and their whānau, ensuring all domains of Te Whare Tapa Whā are met. Honoring Te Tiriti encompassing principles of Tinorangariratanga(self-determination) Paituitangs (partnership), Mana Taurite (Equity) Whakamarumarutia (Active Protection) and Kowhiringa (options).

By applying Te Tiriti in any stoma care will redress the imbalance by understanding from Māori what it is they want and then enabling to provide in a culturally appropriate way.

Accessories

Guidance around appropriate use of accessories

Accessories

Seals

- Provide protection to peristomal skin with irregular shaped stomas
- Extra absorbency
- Provide convexity pressure to flat or retracted stomas

How to use:

- Assess use of seal from above list and choose appropriate seal from brands available
- To minimise stretch of seal, use seal that has a pre-cut size that is similar to size of stoma
- Mould to fit stoma
- Assess patients dexterity and choose whether applying to back of pouch or directly to skin is appropriate:
  - If applying directly to skin, ensure it sits flush with stoma
  - If applying to back of pouch, ensure moulded to aperture

When to use:

- First line use with pouch leakage
- First line with prolapses (absorbency)

Pouch Convexity

- Provides circumferential peristomal pressure to push out the stoma outlet
- Stabilise a mobile abdomen
- Reduce the risk of pouch leakage

How to use:

- When using cut-to-fit pouches, ensure widest cut area on the template, is close to size of stoma. The deepest 'push' is on the edge of the plateau
- *Caution:* Risk of pressure ulcer forming if inappropriate depth of convexity used. Continued regular clinical assessment required due to body habitus changes over time

Characteristics of Convexity:

- *Depth* - Distance from highest point on the skin barrier to the base of the skin barrier
- *Compressibility* - The maximum a mount a convex skin barrier can be flattened
- *Flexibility* - How easily the skin barrier can bend
- *Tension location* - The location of where the convex compresses down and out around the stoma
- *Slope* - Angle from the highest point to the base of the skin barrier

Accessories

Paste

- 'Fill' gaps to provide flat surface for effective pouch application

How to use:
- Wet finger-tips
- It is best if paste is applied to seal or pouch, not directly to skin due to build up
- Apply thick layer of paste on identified areas and 'feather' to mould onto hydrocolloid

When to use:
- Last line for pouch leakage
- Highly mobile abdomen

Perform/Diamonds

- Thicken output sitting in a pouch
- Reduce the risk of pouch leakage

How to use:
- Drop one sachet into pouch with each pouch change
- If using drainable pouch, will need to insert a sachet after each emptying

When to use:
- High output stomas to increase pouch wear time
- *Caution:* Using thickening agents reduces accuracy of output fluid balance. Continued focus of dietary changes is recommended

Skin Barrier

- Provides a thin film coating to the skin and acts as a barrier to corrosive bodily fluids

How to use:
- Spray - one pump to an area and move round
- Wipe – one wipe circumferentially

Pouch Belts

- Increase the convexity of a pouch
- Provide psychological support to patients

How to use:
- Secure a belt hook to each belt lug on convex and 2 piece pouches
- Firm but not tight, must be able to fit at least 2x fingers under belt

Accessories

Skin Barrier (cont.)

When to use:

- Apply when hydrocolloid is unable to protect skin (e.g. sacrificed peristomal skin between separated stomas

Note: Hydrocolloids are designed to work with skin, a skin barrier reduces the effectiveness if used inappropriately

Pouch Belts (cont.)

- Ensure belt sits on the same horizontal plane so it does not lift/drag the pouch away from the stoma
- If using with Hernia or prolapse, loose fit where 4-5 fingers can fit underneath belt

When to use:

- When extra convexity is required
- Clinical assessment when patients are overtly anxious about pouch leakage

Nodur

- Reduce odours

How to use:

- Instil 2-3 drops into pouch with each pouch change
- If using drainable pouch, will need to lift the bottom of the pouch and instil 2-3 drops after each emptying

Hernia Support

- Support the weight of a hernia
- Provide support to an abdomen with reduced muscle tone
- Provide psychological support to patients

How to use:

- Please refer to the Omnigon Support Garments: Parastomal hernia risk reduction, support, and management guide

Accessories

Flange Extenders

- Extend the circumference of a pouch flange to stabilise a mobile abdomen

How to use:

- Ensure the flange of the pouch is secured without crinkles
- Apply half of the extender on the flange and the other half on the skin
- The orientation of the extender is dependent on where the most support is required. The middle of the extender should sit where the most support is required

When to use:

- Very mobile abdomens
- Clinician assessment

Adhesive Remover

- Reduce the risk of skin stripping upon pouch removal

How to use:

- Spray
  - Spray liquid into aerosol cap and "tip" over top side of pouch and allow the liquid to "trickle" under the flange
  - Carefully roll flange off skin in a downward motion
- Wipe
  - Carefully lift top edge of flange and wipe in a sweeping action between skin and flange from top to bottom

When to use:

- With fragile skin on pouch removal and ensure residue is removed before applying new pouch

Stoma Powder

- Used to absorb exudate from broken skin

How to use:

- Apply sparingly to affected area
- Brush away excess

Crusting Technique

- Acute treatment for denuded skin
- Creates a dry pouching surface to allow for extended wear time of pouch to heal wound

Accessories

Stoma Powder (cont.)	Crusting Technique (cont.)
• DO NOT use on intact skin **When to use:** • Moisture associated skin damage • Medical adhesive related skin injury	**How to use:** • Apply a light layer of powder and seal this with a layer of barrier film • Several layers are indicated if excessive exudate • Cease once skin healed

Pre-operative Stoma Siting and Education

Author Rachel Pasley

Pre-operative Stoma Siting and Education

Author Rachel Pasley

Purpose

- Marking the optimal position for stoma formation on the patient's body pre-operatively has the potential to reduce complications, such as pouch leakage[1]
- Pre-operative education and siting promotes patient independence in stoma care and resumption of normal activities of daily living[5]

Process

- Stoma siting is performed by a registered nurse with a defined level of competency[5]
- Establish planned surgery and possible outcome
- Ileostomy and Urostomy are generally sited in the Right Iliac Fossa (RIF), Colostomy in the Left Iliac Fossa (LIF)
- Obtain patient consent and allow whanau/family to be present if requested
- Discuss surgery and reason for needing a stoma with the patient, whanau/family
- Answer any questions the patient/whanau/family may have
- Patient focused educational resources and demonstrate stoma appliances and their use

Identify

- Examine the abdomen from chest to groin with patient in the supine position
  - The rectus abdominis muscle by getting the patient to cough or lift their head to make the muscle more obvious, the site should be within the muscle to minimise future parastomal hernia formation
- Imagine a line between the umbilicus and the iliac crest and place marked tape at mid-point, this is a good starting point, the marked tape can be moved as position is decided
- Any scars, skin folds or creases
- Bony prominences

Pre-operative Stoma Siting and Education

Author Rachel Pasley

The Ideal Site

- On flat, healthy skin, abdominal stomas are ideally sited on the upper infraumbilical bulge (Fig 2.) approximately 5cm away from central suture line and umbilicus and away from the beltline[2]. However, the supraumbilical bulge (Fig 2.) is also an option as site must be:
  - Visible to the patient
  - Within reach of the patient's hands
  - Agreed by the patient
- The proposed site needs to be assessed with the patient (Fig 1.):
  - Lying
  - Sitting
  - Standing
  - Bending

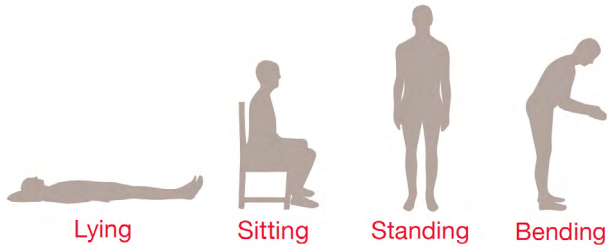

Figure 1. (Retrieved from: Hollister Corporation, 2020)

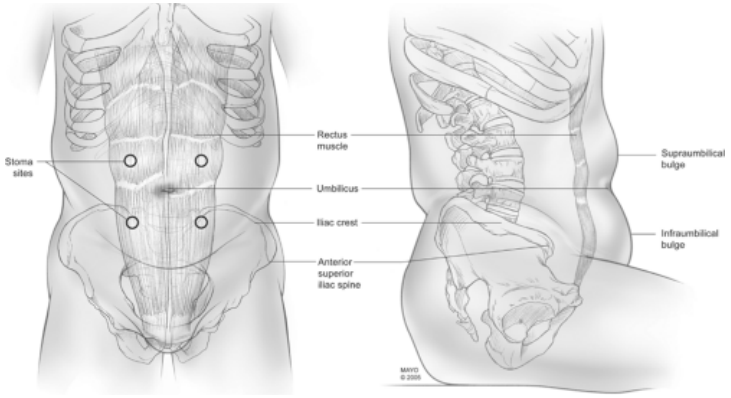

Figure 2. (Retrieved from: Hollister Corporation, 2020)

Pre-operative Stoma Siting and Education

Author Rachel Pasley

Process (cont.)

Considerations

- Age
- Body habitus (obesity/malnourished)
- Mobility
- Contractures/Posture
- Disabilities e.g., visual, manual dexterity
- Prosthetic equipment
- Multiple stomas consider different abdominal levels
  - In case a belt is required
- Level of independence with ADL's
- Location preference (surgeon/patient)
- Lifestyle, sports and hobbies
- Occupation
- Cultural Influences
- Religious considerations (eg. Islamic faith)
- Acute abdominal distention
- Body art

Avoid

- Scars/wrinkles/incision lines
- Skin foldlp.s/creases
- Under pendulous breasts
- Hernia
- Belt line

Once agreed, the stoma site should be marked with permanent marking pen and covered with a waterproof film dressing

Siting on the left and right side should be considered if exact surgery is not confirmed e.g. acute cases or very low rectal anastomosis

Pre-operative Stoma Siting and Education

Author Rachel Pasley

Outcome

When the stoma is sited pre-operatively, it promotes independence and self-care, this has the potential to minimise post-operative stoma complications, leading to improved quality of life[3]

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Principles of Templating

Author Mary Vendetti

Principles of Templating

Author Mary Vendetti

Purpose

- It is important to ensure that the starter hole of a pouch is cut-to-fit or pre-cut to the correct size of the stoma. This will reduce unnecessary trauma to the stoma and maintain good skin integrity [1]
- The size and shape of the stoma depends on the reason for its creation, the area of the gastrointestinal or genitourinary tract used, the type of stoma created and the surgical technique [1]
- When a stoma is created, if it is proximal to a bowel obstruction or an oedematous portion of bowel, the intestine may be overtly oedematous. As the post-operative oedema subsides, the stoma size decreases, usually over a six-week period [1]
- The small intestine is approximately 2.5cm wide, whereas the large intestine varies in width from 2.5cm to 6.3cm. Thus, one of the factors that contribute to the size of the stoma is the anatomical location. Loop stomas are generally larger than end stomas because of the use of the "side" rather than the "end" of the intestine [1]
- A ureterostomy is a small stoma because it is created from the ureter, which has a small diameter, as compared to the larger stoma created with an ileal conduit, in which the ileum is used which has a wider diameter [1]

Process

- The stoma should be measured for size at the site of the muco-cutaneous junction, this measurement will be used to choose the correct pouch and to monitor stoma progress
- Circular measuring guides (Fig. 1) are available and are appropriate to use with a round stoma
- An oval stoma can be measured at the longest and widest diameters or can be sized by using a piece of plastic to trace it
- It is best to measure the stoma when the patient is sitting and standing
- Until oedema has subsided, re-measuring at frequent intervals is necessary
- Patients should also be aware of changes to contours of their body if they should gain weight, lose weight or develop a parastomal hernia. They may need to re-measure and reassess their stoma size

Principles of Templating

Author Mary Vendetti

Measuring a round stoma

- Pull the skin above the stoma taut and maintain this tension while measuring
- Place the opening of the measuring guide around the stoma
- Find the opening size that easily fits around the stoma and leave 2mm between the guide and the edge of the stoma at the base (skin level)

Measuring an oval stoma

- Find the opening size that easily fits around the widest part of the stoma and leave 2mm between the guide and the edge of the stoma at the base (skin level)
- Find the opening size that easily fits around the narrowest part of the stoma and leave 2mm between the guide and the edge of the stoma at the base (skin level)

Stoma Measuring Guide

Figure1. (Retrieved from: St LukesTM)

Outcome

An accurate template to reduce the risk of leakages and peristomal complications.

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Removal of Ureteric Stents from an Ileal Conduit

Author Erica Crosby

Removal of Ureteric Stents from an Ileal Conduit

Author Erica Crosby

Purpose

Ureteric Stents are safely removed. Patient receives education and monitoring advice for possible adverse effects (for example infection due to disturbance of localised bacteria). Ureteric Stents are inserted during surgery through the stoma, threaded through each ureter to rest in the kidney. Their purpose is assisting in the prevention of ureteric collapse due to oedema, and to support the ureteroileal anastomosis whilst it heals. Further reading is recommended.

Process

- Prior to removal ensure documentation is viewed requesting removal of stents, any prophylactic medication and date of removal by surgical team
- Remove existing urostomy pouch and clean stoma and peristomal skin. Cut cutaneous suture if present
- Don clean gloves. Remove stents one at a time, using sustained gentle traction. Advise procedure may feel disconcerting however, if the patient experiences pain or resistance is felt during stent removal, discontinue removal and contact Urologist
- Visually check each stent to ensure they have remined intact on removal
- Clean stoma and re-apply pouch
- Discuss with patient:
  - Risk of bacterial infection due to bacterial disturbance
  - Signs and symptoms of a urine infection
  - Need to increase fluid intake for 48 hours to flush conduit
  - If unsure, seek medical assistance

Outcome

Stents are safely removed, reducing the risk of complications.

Removal of Ureteric Stents from an Ileal Conduit

Author Erica Crosby

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Obtaining a Urine Specimen from an Ileal Conduit

Author Vicky Beban

Obtaining a Urine Specimen from an Ileal Conduit

Author Vicky Beban

Purpose

To obtain a specimen of urine from a urostomy/ileal conduit for the purpose of diagnosing infection.

Clinical Signs and Symptoms

Asymptomatic bacteriuria is very common in patients with ileal conduit diversion and does not need to be treated[2]. Systemic signs of infection that need to be treated include:

- A change in the odour and colour of the urine
- An increase in mucus production and/or change in colour
- Fever
- Chills, nausea and vomiting and/or flank pain[1]

Process

Clean Catch Method

To obtain a urine specimen:

- Remove old pouch, clean stoma and dry
- Place urine specimen container directly under the stoma and catch urine
- Alternatively, place a new urostomy pouch and collect first pass urine
- Pressing on the peristomal skin may allow more urine to be expressed
- At least 10mls of urine is required for culture purposes

Obtaining a Urine Specimen from an Ileal Conduit

Author Vicky Beban

Outcome

Obtain a clean specimen of urine from a urostomy with minimal contamination.

References

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High Output Stoma Management - Hospital and Community Settings

Author Preeti Charan

High Output Stoma Management

Author Preeti Charan

A high output gastrointestinal stoma passes more than 1000mls/24 hours[3,5]

Purpose

Minimize the morbidity and associated renal and electrolyte derangement caused by high stoma output.

Complications of High Stoma Output

- Dehydration and Acute Kidney Injury (AKI)
- Electrolyte derangement
- Weight loss/Malnutrition
- Fatigue

Clinical Signs and Symptoms of Dehydration

- Excessive watery loss from the stoma
- Dry mouth/increased thirst
- Passing concentrated and low volume of urine
- Nausea and/or vomiting
- Tired and drowsy/episodes of fainting
- Headache
- Muscle weakness/cramps
- Low urinary sodium
- Low serum magnesium

Important Note for Community Patient:

If patient displaying any of the following symptoms, seek urgent medical advice:

- Severe thirst
- Dry mucus membranes
- Anuric or infrequent urination
- Fatigue/tiredness
- Reduced skin turgor
- Headache
- Dizzy
- Clinical concern

High Output Stoma Management

Author Preeti Charan

Process

Hospital	Community
Complete clinical assessment as part of a multidisciplinary team: • Assess fluid balance chart and oral intake • Surgical history	Complete clinical assessment: • Assess fluid and oral intake • Surgical history

Assess cause:

- Gastrointestinal infection
- Medication related- prokinetic drugs such as metoclopramide, laxatives, antibiotics
- Non-concordance with medication
- Non-concordance to recommended diet advice
- Possible bowel obstruction
- Possible intra-abdominal sepsis
- Inflammatory Bowel Disease (IBD)
- Short Bowel Syndrome

High Output Stoma Management

Author Preeti Charan

Management

Hospital	Community
• Strict fluid balance • Daily weight • Stool culture to exclude GI infection (Microscopy, Culture, and Sensitivity) • Medication reconciliation (stop prokinetic, check if steroids/opiates where recently stopped, alternative to Metformin) • Complete blood tests (U&E, Mg, Phosphate, Ca, CRP) • Resuscitate with crystalloids for rehydration • Complete urine sodium test • Consider gut rest by keeping patient nil by mouth (NBM) if abdominal abnormality is suspected or confirmed • If oral intake is allowed: – Refer patient to the Dietician for dietary and fluid intake advice to avoid malnutrition and dehydration	• Maintain oral food and fluid diary • Measure output • Restrict hypotonic fluids (E.g. water, tea, coffee, fizzy drinks etc.), Encourage patient to eat and drink separately with their meals • Encourage patient to drink oral rehydration solutions (e.g. Gastrolyte, Enerlyte or St Mark's Solution). Explain rationale of isotonic fluid to patient to encourage compliance as the fluids can be unpalatable • Assess dietary intake and advise patient accordingly. Encourage low fibre, low residue dietary intake and add half a teaspoon of salt per 24 hours to food if there is no medical restriction for salt intake • Stool culture to exclude GI infection (Microscopy, Culture and Sensitivity) • Consider anti-motility medication such as Loperamide and advise patient to take it at least 30 minutes before each meal. Loperamide, in capsule form, must be opened and the powder content dispersed in 10mls of water for administration

High Output Stoma Management

Author Preeti Charan

Management

Hospital Cont..	Community Cont..
– Consider low fibre low residue meals adding salt to food if there is no medical restriction for salt intake – Restrict oral hypotonic fluids – Encourage patient to drink oral rehydration solutions (e.g., Gastrolyte, Enerlyte or St Mark's Solution – Start anti-motility medication such as Loperamide. Loperamide should be administered at least 30minutes before each meal. Loperamide, in capsule form, must be opened and the powder contents dispersed in 10mls of water for administration – Consider Codeine Phosphate as second line anti-motility medication, administer at least 30 minutes before each meal. For medication, input from pharmacist is important • Consider CT imaging • Consider Proton Pump Inhibitors such as Omeprazole	• Consider stool bulking agent such as Konsyl-D and provide education around use • Arrange blood test (U&E, Mg, Phosphate, Ca, CRP) • Discuss with GP your clinical concerns • Assess stoma and peristomal skin and ensure patient is wearing appropriate appliance to reduce risk of appliance leakages • Discuss treatment escalation plan that is agreed upon with patient: Document this plan in the patient notes. Chase blood and urine tests results • Complete close follow-up with patient until symptoms resolve, ensuring continued patient education to reduce risk of repeat symptoms

- Clinical concern

High Output Stoma Management

Author Preeti Charan

Outcome

- Stoma output has reduced less than 1000 ml in 24 hours or returned to their normal output volume and consistency
- Patient feels well hydrated and does not show any symptoms of dehydration
- Cause of high output is established and corrected

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Parastomal Hernia Recognition and Management

Author Holly Dorizac

Parastomal Hernia Recognition and Management

Author Holly Dorizac

Purpose

To reduce risk of hernia development and to provide conservative measures to minimise symptoms and discomfort of developed hernias.

Clinical Signs and Symptoms

A parastomal hernia is described as a deficit in the abdominal fascia that allows the intestine to bulge into the parastomal area[1]. Classical signs include a bulging of the abdomen around the stoma, pain and discomfort[2]. Patients may also present with difficulty maintaining a seal. Assess hernias while the patient is lying down and ask them to cough, bear down or lift their head[1].

Important Note:

Requires urgent surgical review:

- Strangulation
  - Change in stoma color to dark red, purple or black due to lack of blood supply
- Bowel obstruction
  - Severe abdominal pain, nausea or vomiting, inactive stoma, abdominal swelling[3]

Parastomal Hernia Recognition and Management

Author Holly Dorizac

Process

Assess clinical risk factors for hernia development

- Risk factors include:
  - Poor stomal siting
  - Previous hernia development
  - Previous surgical history
  - Obesity
  - Malnutrition
  - Increased abdominal pressure:
    - Heavy lifting
    - Coughing/Chronic lung disease
    - Abdominal distention
    - Ascites
    - Constipation
  - Increased age
  - Collagen abnormalities
  - Steroid use
  - Diabetes
  - Smoking
  - Aortic aneurysm
  - Diverticular disease
  - Malignancy[1,4]
- Parastomal hernias should be managed in partnership with surgeons[5]. Surgical repair can be associated with a high level of recurrence, morbidity and mortality[6]. Education should include discussion on red flags (described above), reducing modifiable risk factors and optimising functional output to prevent diarrhoea or constipation[4]
- An ostomy itself acts as a barrier to exercise and physical activity, education and encouragement is required[7]. Start with gentle rehabilitation movements gradually building core strength at one's own pace and ability from 3-4 days post-operatively. Vigorous abdominal activity such as crunches, sit ups or planks should be avoided for the first 3 months postoperatively[7]. Exercises should not be painful or put excess strain upon abdominal muscles, this could include gentle abdominal exercise, pelvic tilts and knee rolls[4]

Parastomal Hernia Recognition and Management

Author Holly Dorizac

- A hernia support garment can contribute to a feeling of safety, looking normal, conceal a parastomal bulge and relieve symptoms such as pain, a feeling of bearing down or falling out, and can help patients resume usual social activities. However, there is limited evidence around whether a garment reduces the risk of developing a hernia or reducing enlargement of a parastomal bulge[6]. There can be low rates of continued regular use of garments. Patients should be assessed to ensure garments fit individual needs[8]. Openings in support garments is not advised as the hernia can often push through[4]. Support garments are best fitted in the morning, the ostomate should lie down for 2-15 minutes prior to application to allow the hernia to recede
- Review stoma size and fit of appliance ensuring the risk of skin stripping is minimised on fragile skin[4]. If a patient has issues with water or stool not easily returning with colostomy irrigations this should be discontinued[5]

Outcome

Patient maintains a good quality of life by reducing the risks for hernia development or through managing hernia symptoms.

Parastomal Hernia Recognition and Management

Author Holly Dorizac

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Prolapse Recognition and Management

Author Christina Cameron

Prolapse Recognition and Management

Author Christina Cameron

Stoma prolapse is defined as an abnormal protusion of the stoma after creation. Stoma prolapse is identified as a late stoma-related complication which increases difficulty in stoma care and affects patient quality of life.

Purpose

To identify and manage a prolapsed stoma

Assess for risk factors:

- Increased age
- Obesity
- Weakness of the abdominal fascia
- Constipation
- Diverticular disease
- Hernia
- Increase in intra-abdominal pressure
  - The rectus abdominis muscle by getting the patient to cough or lift their head to
  - Severe coughing
  - COPD
  - Ascites
  - Abdominal distension
  - Aortic aneurysm
  - Malignancy
  - Pregnancy

Clinical Signs and Symptoms

- Abnormal protrusion of the mobile or redundant intestine pushing the stoma forward
- The length and the circumference of the stoma increases. Stoma can become oedematous

Prolapse Recognition and Management

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- The proximal end of the stoma can also become discoloured from friction rubbing on the pouch
- Blood supply to the stoma can be compromised
- Stoma pouches become difficult to fit, leakages can occur
- Body image is further compromised
- In some cases, the patient may have pain

Process

- On discovering the patient has a prolapse, keep calm and reassure the patient
- If able, pouch the prolapse, or cover with a clean moist cloth or sterile guard
- Measure the stoma circumference at base and also measure the length of bowel protruding.
- Document colour, oedema, and If able, take a photograph as per local policy
- Discuss with patient's surgical team
- Smaller prolapses can be easily reduced by the Stoma Nurse (if they are proficient at this)
  - Moist cloth and gentle pressure
  - White sugar (Use with caution i.e. Diabetic patients).
    - When sprinkled on the prolapsed stoma this may reduce the oedema by the osmotic effect. (After using sugar, the output in the pouch will be syrupy and viscous)
- Reassess pouch that the patient is using as it will need to accommodate the prolapse
  - Provide education to the patient on how to assess changes in the prolapse and how to reduce with gentle pressure whilst lying supine.
  - Reassess and adjust template
  - Consider a soft convex pouch with a loose belt applied. This can give patient reassurance that the prolapse will not push the pouch off
  - Flat maxi pouches are also effective with the use of seal to help with adherence and absorption of increased mucus production
  - Consider feathering into the aperture to allow changing of prolapse size
- Regular review to monitor prolapse

Prolapse Recognition and Management

Author Christina Cameron

Important Note:

If prolapse of the bowel is severely discoloured e.g. dark purple or black, seek urgent surgical review

Outcome

- Independent management of prolapse by patient and optimise quality of life
- Reduce need for surgical intervention

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Mucocutaneous Separation Management

Author Angela Makwana

Mucocutaneous Separation Management

Author Angela Makwana

Stoma Mucocutaneous Separation, (MCS), is most commonly an early post-operative complication[1]. Where the stomal tissue becomes detached from the surrounding peristomal skin[2]. The incidence of MCS ranges from 4% - 24% within the first 6 weeks1,3,4. Identifying MCS early supports effective conservative treatment to be implemented, promoting healing and reduce the risk of pouch leakages and/or further complications. Ongoing close observation is highly recommended where there has been circumferential MCS as there is a high risk of retraction or stenosis in the future due to scaring[6]

MCS can be caused by slow/poor healing, tension on stoma, wound infection or predisposing factors such as:

- Diabetes
- High use of corticosteroids
- Malnutrition
- Obesity
- Previous radiation
- Acute surgery - not preoperatively sited causing excessive tension on the stoma
- Excessive oedema/swelling
- Stoma necrosis
- Poor surgical technique
- A pouching system that is too tight in the immediate postoperative phase of healing
- A post-operative pouch should be changed within 48 hours

Clinical Signs and Symptoms

- Peristomal dehiscence - open wound/broken suture line around stoma
- Pain/discomfort
- Leaking pouch

Mucocutaneous Separation Management

Author Angela Makwana

Process

Management of MCS will depend on size, depth, wound base and exudate of MSC

- Assess and identify MCS:
  1. Size – partial or circumferential
  2. Depth – superficial (at skin level) or full thickness extending to the fascia by using cotton tip applicator6
  3. Wound base – necrotic or granular
  4. Exudate – Volume, appearance (purulent, sanguineous, faecal)
- Documentation and clinical photography, as per local policy, to assess progress of healing and effectiveness of treatment plan
- Peristomal dehiscence - open wound/broken suture line around stoma
- Apply wound care principles that promote healing by secondary intention[5]
- Treat slough with irrigation or pectin based stoma powder applied to moist area can aid adherence and promote auto-lytic debridement[6]
- If wound exudate requires extra absorbency consider wound dressings such as alginates
- Consider stoma accessories to create a smooth surface to apply pouch e.g.
  - Seals
  - Paste
- Ensure the flange of the pouching system is well fitting and is applied over the peristomal skin and MCS to ensure protection from the stoma output
- Change the pouching system every two to three days. A highly exudating MSC should be changed daily until exudate reduces
- Convexity can be applied with caution only on **recommendation of Stoma Nurse**
- Ongoing monitoring is highly recommended due to risk of stoma stenosis

Outcome

Early management of MCS is optimised to reduce pain/discomfort and promote wound healing.

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Stoma Stenosis Recognition and Management

Author Emma Ludlow

Stoma Stenosis Recognition and Management

Author Emma Ludlow

Stoma stenosis is the narrowing of a stoma at the trephine (skin opening) or fascial level, which affects stoma output drainage. The most common form is narrowing of the trephine. It is estimated that 2-15% of stomas can develop stenosis at any time during the post-operative period. With the improvement of surgical techniques, stoma stenosis occurs rarely in the early post-operative period but rather, occurs in the late recovery period (more than 30 days postoperatively).

Purpose

Management of stoma stenosis until safe to surgically refashion stoma

Risk factors:

- A significant mucocutaneous separation
- Stoma necrosis
- Stoma retraction
- Enterocutaneous fistula formation
- Inflammatory bowel disease
- Malignancy

Clinical Signs and Symptoms

In stoma stenosis at both the trephine and fascial layer, the patient may experience:

- Pain when passing output
- Report small and thin ribbon like stool
- Constipation followed by very large amount of evacuation
- Noisy flatus
- With stomal stenosis at the trephine, the skin opening will appear small and the mucosa of the stoma will be below skin level
- Urostomy patient
  - May have frequent urinary tract infections,
  - Projectile urine stream
  - Flank pain

Stoma Stenosis Recognition and Management

Author Emma Ludlow

Important Note:

If the patient notes a reduced output from their stoma, they must be referred back to their surgical team. If there is no output, they must seek urgent surgical review.

Process

- Close monitoring for signs and symptoms of a stoma stenosis forming is required
  - Measure skin opening
  - Clinical photography as per local policy
  - If two consecutive clinical images show a reduction in the size of the skin opening, immediate notification to the patient's surgical team is required
  - The frequency of assessment is a clinical judgement but should be no less than once a week
- Preferably the following assessment is completed by the same Stoma Nurse to ensure consistency in measurement. The degree of stenosis can be assessed by inserting a gloved, lubricated finger in the stoma. The stoma nurse is assessing the size and mobility of the skin and fascial rings of the stoma
- Frequent communication with the patient's surgical team is required to assess escalation of intervention due to the speed at which the narrowing can occur
- Ongoing conversations with the patient about ensuring their diet is soft and includes plenty of fluids to keep their output thin enough to pass easily through the outlet

Stoma Stenosis Recognition and Management

Author Emma Ludlow

Process (cont.)

- The patient's surgical team may prescribe skin opening dilatations until such time surgical intervention and refashioning of the stoma is safe to undertake. The patient's surgical team will prescribe frequency and size of dilator that the Stoma Nurse will then educate the patient to complete independently

  Equipment:

  - Dilator
  - Water based lubricant
  - Gloves
  - Clinical assessment must include appropriate ostomy pouch and the frequency of changes required due to the likely twice daily dilations. A two-piece ostomy appliance is indicated to preserve skin integrity

Outcome

Independent and safe patient dilatations with close clinical monitoring until their stoma can be safely refashioned

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Granuloma Management

Author Maree Warne

Granuloma Management

Author Maree Warne

Purpose

To guide in the management and treatment of granulomas

Clinical Signs and Symptoms

- Papular hypergranulation (wart like presentation) that occur on the mucocutaneous junction or stomal mucosa[1,2]
- Bleed easily[1,2]
- Tender[1,2]
- Impaired pouch adhesion[1,2]

Process

Complete an assessment on the following:

- Medical history - Underlying medical conditions need to be excluded (i.e. active Crohn's disease or cancer reoccurrence)[1]
- Observe pouch change technique
- Check for exudate on flange
- Check the aperture of the pouch is cut to the correct size
- Check appropriate pouch choice - Incorrect or ill-fitting pouches can cause leakage and irritation to the mucocutaneous junction which can result in granuloma formation[1,3,4]
- Location of granuloma: Granuloma on the stoma itself, *refer to surgeon.* If granuloma on mucocutaneous junction, initial treatment can be administered by Stomal Therapy Nurse[1]
- Document and photograph as per local policies
- Check for allergies to silver – omit silver nitrate treatment if allergy is present
- Monitor granuloma if not problematic[1]
  - Monitor amount of bleeding
  - Is there discomfort?

Granuloma Management

Author Maree Warne

Treatment

- Correct any pouching issues that may have caused granuloma (i.e. size of aperture and application of pouch). Advise patient to change pouch before leakages occur[3,4]
- Protect surrounding skin[5]
- Apply 75% Silver Nitrate on applicator stick directly onto granuloma.
  - Silver nitrate oxidises organic matter, coagulating tissue and destroying bacteria resulting in the excess tissue sloughing off[1] (the moisture of the stoma mucosa will activate the silver)
- Apply for five seconds to achieve maximum tissue penetration
- Treat once a week for four weeks only (treatment may become ineffective if continued)
  - Stoma Nurse to review weekly
- Even out the surface of the peristomal skin with ostomy powder[4] or place seal over the treated granuloma, under the pouch

Post Treatment Assessment

- No further problems - successful treatment
  - Advise patient regarding preventative measures to ensure no further granulomas develop (i.e. correct fitting pouch and preventing leakages)
- Granuloma remains problematic
  - Refer to surgeon for review and electric cauterisation (if needed) to remove excess tissue[6]

Outcome

- Granuloma resolves
- Patient or carer understands how to prevent granulomas, monitor for any complications and when to contact medical staff if concerned

Granuloma Management

Author Maree Warne

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Management of Constipation with a Colostomy

Author Marie Buchanan

Management of Constipation with a Colostomy

Author Marie Buchanan

Purpose

Identify and manage constipation with a colostomy to reduce the risk of further complications such as prolapsed stoma, parastomal hernia, or acute issues such as a bowel obstruction or perforation

Clinical Signs and Symptoms

- Stools hard to pass through stoma into pouch
- Hard pebble type stool passed into pouch (Bristol Stool Type 1 and 2)
- Pouch is empty when usually active
- Waves of abdominal cramping and pain
- Abdominal bloating
- Tenderness over lower abdomen
- Reduced bowel sounds
- Reduced or no flatus
- Oedematous/prolapsed stoma
- Watery discharge indicating overflow (severe cases see important note)

Process

Conservative measures (can also be used as ongoing management and preventive management):

- Increase fluid intake
- Increase insoluble fiber such as whole grains, fruit and vegetables in diet
- Encourage gentle exercise
- Gentle massage across abdomen
- Consider prescription laxatives
- If conservative measures are not effective, administer an enema if/as prescribed

Important note:

If stoma not active for over 24hrs (outside of normal pattern) and experiencing pain and/or vomiting, seek medical advice immediately as high risk of acute bowel obstruction.

Management of Constipation with a Colostomy

Author Marie Buchanan

Outcome

Return to regular bowel habit and reduce the risk of complications

References

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Pancaking with a Colostomy

Author Coralie Bellingham

Pancaking with a Colostomy

Author Coralie Bellingham

Purpose

Pancaking refers to faeces collecting around the stoma and not dropping into the pouch. Pancaking can cause damage to the peristomal skin and may affect adherence of pouch[1,3]

Clinical Signs and Symptoms

By accumulating at the top of the stoma, faeces can push under the flange and lift the pouch. This can lead to an increase in pouch use. Certain stool consistencies appear to contribute towards pancaking, thick, tacky stools which lack fiber and moisture

Process

- Stoma Nurse to conduct a thorough assessment of the patient including clinical history, degree of pancaking, food, fluid and lifestyle assessment
- Assess output of the stool using the Bristol Stool Chart, type 4, has been identified as the most common type in creating pancaking[3]

Changes to intake:

- Fluids- can assist in changing the consistency of the stool (8-10 glasses per day or 1800-2000mls) unless contra-indicated by medical condition such as renal impairment
- Diet - an increase in the amount of fiber included in diet may assist in changing the consistency of the stool, allowing output to drop into pouch
- Stool bulking agents- can be considered to make the output a looser consistency such as psyllium-based bulk forming agent to maintain[2]

Changes to pouching technique:

- A vacuum in the pouch may contribute to pancaking, this may be reduced by:
  - Introduce air into the pouch before application
  - Insert scrunched up tissue paper into pouch
  - Use of a filter cover (usually provided with appliances)
  - Lubricate interior of pouch with shampoo/oil/lubricating gel
  - Change pouch type: may e.g. 2 piece pouch, drainable, soft -convexity or without a filter

Pancaking with a Colostomy

Author Coralie Bellingham

Changes to pouching technique (cont.):

- If none of these interventions are successful, stoma irrigation may be an alternative measure in consultation with surgeon and if not contra-indicated

Outcome

The incidence of pancaking will be reduced

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Colostomy Irrigation

Author Rochelle Pryce

Colostomy Irrigation

Author Rochelle Pryce

Purpose

Colostomy irrigation was introduced in the 1920s and has been demonstrated as an effective alternative for achieving bowel continence for permanent colostomy patients[1]. Irrigation enables patients to gain some control over their bowel function by forming a pattern for elimination, reducing uncontrollable flatus, odour and leakage and significantly improving their quality of life.[2,3]

Depending on placement of the colostomy (ascending, transverse, descending) this will affect the type and consistency of the stool eliminated. Stomas positioned in the descending or sigmoid colon will contain formed stools with no digestive enzymes which makes this stoma ideal for colostomy irrigation.[6,7] Irrigation is a technique that is taught post operatively to patients who have a permanent end colostomy positioned in the descending or sigmoid colon.

Considerations

Not all permanent colostomy patients are able to irrigate, so it is vital to have an awareness, knowledge, and understanding around these reasons. There is specific patient criteria required before teaching colostomy irrigation, with the most important indicators identified as patients being motivated and committed to learn the procedure, have good manual dexterity, eyesight and are not cognitively impaired.[8,9,10]

Ideal candidates for irrigation are patients that have their colostomy positioned in the descending or sigmoid colon and have no residual disease in the remaining colon.

Contraindications

- Patients with active irritable bowel syndrome
- Crohn's disease
- Diverticulitis
- History of renal or cardiac impairment
- Colostomy positioned in the ascending or transverse colon
- Poor bowel habits resulting from radiation or chemotherapy damage
- Prolapse or parastomal hernia
- Poor vision
- Altered mental alertness
- Poor manual dexterity.[2,4,8,9,10]

Colostomy Irrigation

Author Rochelle Pryce

Prior to teaching irrigation, it is essential Stoma Nurses conduct a thorough comprehensive assessment to ensure their patient meets the relevant criteria, and confirmation and consent needs to be obtained from the surgical consultant before teaching can begin.

Process

Teaching irrigation is very private, individualised and must be undertaken in a negotiated partnership. Patients are taught in their own home in a relaxed and stress-free environment usually by Stoma Nurses competent in this subject.

- Tepid water (37°C) is instilled into the colon resulting in colonic dilatation and an increase of luminal pressure within the colon[4]
- This pressure encourages peristaltic waves and reflex contractions which results in the elimination of stoma output and the instilled water from the colon[4]

Equipment and Set-Up

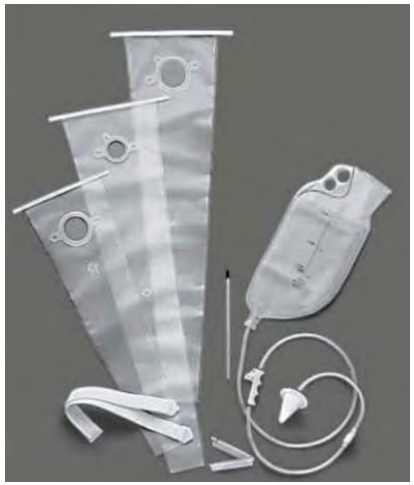

Figure 1. Colostomy Irrigation Kit. (Retrieved from: Hollister Education)

Colostomy Irrigation

Author Rochelle Pryce

Equipment and Set-Up

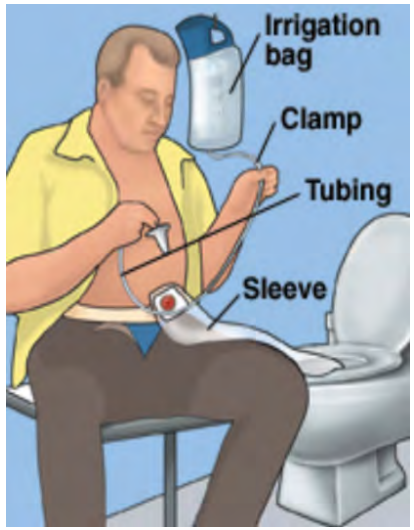

Figure 2. Irrigating your colostomy. (Retrieved from: St Luke'sTM)

- A colostomy kit will be provided and all components of the kit are shown and discussed before teaching begins (Fig 1.)
- The technique of irrigation is explained in detail to the patient allowing time for any questions and/or concerns. Irrigation is undertaken in/on the toilet (Fig 2.) and the Stoma Nurse demonstrates the set-up of the equipment, ensuring patient safety and comfort at all times
- The Stoma Nurse will demonstrate and supervise how to digitate the colostomy with a lubricated gloved finger to ascertain the direction of the colon. Explain the rationale for regular digitation to the patient
- The irrigation bag is filled with tepid water and hung at shoulder height, allowing gravity to assist with water flow
- The patient fits the irrigation sleeve, sits on the toilet and with assistance from the Stoma Nurse, inserts the lubricated cone into the stoma at the angle previously found
- The water flow begins and is run slowly over a period of 5-10 minutes, then colonic dilatation occurs which will encourage peristaltic waves resulting in the elimination of bowel contents

Colostomy Irrigation

Author Rochelle Pryce

Equipment and Set-Up

Colostomy irrigation can take up to an hour and needs to be completed daily until a pattern is formed. Once this occurs, patients may only need to irrigate alternate days or every third day. Patients choose to irrigate either morning or night, depending on lifestyle and routine commitment.

Multiple teaching sessions may be required for patients to become confident with regular ongoing follow up. Follow up care is vital as it identifies areas that need to be rectified and reduce any unnecessary stress caused to the patient.

Possible Complications

- Minor bleeding from the stoma, abdominal cramps and incomplete emptying of the inserted water
- As the bowel has no nerve endings it is imperative the water to be instilled, is tepid tap water (37°C). If the water is too cool or inserted too quickly, this can result in abdominal cramps. In contrast, if the water is too hot this may result in a burn injury to the colon, causing a stricture. This may result in the patient needing to have surgical reconstructionof their colostomy
- Vasovagal episodes may happen due to the colon being distended, which can result in dizziness and a drop in blood pressure and heart rate[4]
- Break through bowel activity between irrigations can occur. Review frequency of irrigations and fluid volume

Outcome

Patient is able to undertake irrigation independently to establish a predictable bowel pattern

Colostomy Irrigation

Author Rochelle Pryce

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