Ostomy Management: Procedure for Changing a One or Two-Piece Urostomy (ileal conduit) Pouching System

Site Applicability

All VCH & PHC sites

Practice Level

Basic skills for the following professions (within their respective scope of practice):

- RN, RPN, LPN, NP

Policy Statement

- A physician or NP order is not required to change an ostomy pouching system.
- If a flange/pouching system is leaking, it must be changed immediately. Do not under any circumstances reinforce the edges of the flange as this traps the urine and can lead to skin irritation and damage.

Need to Know

- A Urostomy is a surgically created opening between the skin and the ureters using a piece of small bowel to act as a conduit for the urine to divert the urine. A urostomy/ileal conduit is a permanent ostomy. This opening is referred to as a stoma. A healthy stoma is pink to red, moist, shiny, and raised above skin level. (See Ostomy Definitions, types of surgery)
- The underlying etiologies for the ileal conduit/urostomy may be cancer, trauma, congenital, or interstitial cystitis.
- Patients wear a pouching system to collect and contain urinary output and to protect the skin from irritation. There are a wide variety of pouching systems to meet different needs. A Wound Ostomy Continence Nurse (WOCN) / Enterostomal Therapist (ET) nurse can make recommendations to individualize the product choices to the patient's preferences and needs.
- Ostomy pouching systems are changed every 4 to 7 days as indicated on the care plan unless one of the following conditions occur: leaking, falling off partially or completely, procedure or test required pouching system to be removed, patient complains of burning or itching under the pouch, exposed skin is visible around the stoma, or pouching system becomes odorous.
- Patients are expected to participate in all aspects of the care of their new ostomies. Health Care Providers (HCPs) should promote patient and family involvement. Patients with an existing ostomy are expected to continue with self care utilizing their own supplies.
- If a patient is unable to care for his or her own ostomy, then a caregiver needs to be taught to care for the ostomy
- Patients with new ostomies often struggle emotionally with acceptance of their altered pattern of elimination. Compassionate, empathic care will positively impact the patient during this phase of acute adjustment. Be aware of non verbal expressions.
- The flange portion of both a one piece and two piece pouching system may be flat or convex. The pouch may be drainable or closed. The pouch is made with an anti-reflux valve to help prevent urine from refluxing towards the stoma. A drainable Urostomy pouch has a tap/spigot mechanism on the bottom of the pouch.

- A night drainage bag or container may be attached to the existing pouching system so that client does not have to wake up at night to empty the pouch. This is attached to the pouching system using a special urostomy adapter. Each company has an adaptor specific to their products, they are not interchangeable.
- It is normal to have mucous with the urine in the pouch as the ileal conduit is created from the small bowel.

One-Piece

- There is a skin barrier (flange) that sits against the patient's skin and a plastic pouch that will contain the urine. The bottom of the pouch has a tap/spigot for draining the urine.

Two-Piece

- A two piece pouching system consists of a flange (also called barrier, or plate) and a separate ostomy pouch. The flange and pouch couple together to form an integrated unit. The coupling sizes vary within a product line, therefore it is important to ensure the sizes match. The type of coupling depends on the manufacturer of the appliance and the individual product line. Pouching systems are no longer interchangeable between manufacturers.

Equipment & Supplies

- Hand washing supplies
- Cleaning cloths e.g. paper towels, J-cloths, face cloths, gauze
- Warm water
- Single patient use scissors (if appliance not pre-cut)
- Pen/marker (if appliance not precut)
- Blue pad
- Stoma measuring guide
- Ostomy pouch if using one piece pouching system
- Ostomy flange and pouch if using two piece pouching system
- Container to empty pouch into if client not emptying into toilet
- Garbage bag
- Accessories as per care plan

See Clinical Decision Grid for Ostomy Accessory Products

Procedure

Changing a Urostomy Appliance:

Procedure	Rationale
1. Put on clean gloves, place blue pad below the pouch.	Clean technique, to protect the linen and patients clothing.
2. Empty the current pouching system, measure contents if ordered, unless a closed pouch.	A full pouch may spill on the patient or bed; In and Out documentation may be required if indicated.
Remove old pouching system by gently lifting flange from the skin. Support the skin with your other hand. An adhesive remover may be used. If stents insitu: see Clinical Decision grid for assessment. Caution not to pull Discard old pouch in garbage bag.	Supporting the skin will help to prevent skin tears. An adhesive remover may be used to decrease skin and hair stripping, or for painful removal. Pulling on stents may dislodge them.
3. Gently clean the stoma and peristomal skin using warm water and cleaning cloths. **If removing paste from the skin, use a dry cleaning cloth first.**	Aggressive cleaning can result in the stoma bleeding. If this occurs apply pressure until the bleeding subsides. The use of other cleaning solutions may irritate the skin or stoma. Specific cleaning solutions other than water is not needed as the stoma is not sterile. A wet cloth may smear remaining residue inhibiting removal of paste.
4. Assess the stoma as per stoma assessment policy. *(see CPD: Assessment & Management of an Ostomy)*	A stoma should be pink to red and moist. A dusky, gray or black stoma indicates poor blood flow to the stoma. Ensure the surgeon and/or WOCN/ET is notified.
5. Assess the peristomal skin for breakdown, rash or wounds. If you have any concerns regarding the appearance of the stoma or peristomal skin please contact the WOCN/ET (See Appendix B: Clinical Decision Grid for Stomal Complications)	There are multiple conditions that can occur and may require a change to the care plan.
6. Measure the stoma using the stoma measuring guide. The opening should be 2 mm or 1/8" larger than the stoma size. For a round stoma, you will need to measure the diameter. For an oval stoma, you will need to have two measurements to create an oval shape (the length and width)	Measuring the stoma will assist with cutting the correct size opening on the pouch. Stoma measuring guides are available (see Clinical Decision Grid for Ostomy Accessory Products) A smaller gap can cause damage to the stoma and a larger gap can allow for breakdown of the peristomal skin.

Changing a One-Piece Urostomy Appliance:

Procedure	Rationale
For a cut to fit appliance: 1. Trace the required opening onto the back of the pouching system and cut opening accordingly. Ensure not to reverse the template image. Starting in the pre-cut hole, cut on the outside of the pen marking. DO NOT cut a hole in the pouch film/plastic. 2. Keep template with patient's supplies and label with date and pouch/skin side. **For a precut pouching system:** The opening is pre-sized to the client.	The pen marking may affect the size of opening and make it smaller. Reversal of the template image may cause an oval opening to be inaccurate Moving the pouch away will prevent from accidently cutting through the pouch. Keeping and labeling the template will save time and prevent reversal of the template image.
3. If required, trim edges of the pouch adhesive to avoid drains and incisions – off centering of opening may alleviate the need for this.	Pouch adhesive may not adhere over staples and sutures or drain sites
4. Accessory products may be used at this time: a. paste or rings to create a flat pouching surface b. powder and skin sealant to treat skin breakdown See Clinical Decision Grid for Ostomy Accessory Products.	A flat pouching surface is required to enable the appliance to adhere and prevent leaking. Contact WOCN/ET if needing further consultation or support. Excoriated/denuded skin can weep, preventing the flange from optimal adherence.
5. **Remove backing from pouching system**. If pouch adhesive has a taped border then leave the tape border on. Remove the tape/plastic from the center of the pouching system.	The taped border will allow you to hold onto it as the pouching system is applied to the skin.
6. **Application of pouching system** Ensure the skin is dry. Center opening over the stoma for a transparent pouching system. For an opaque pouching system fold the pouch adhesive in half and align the bottom of the pouching system opening with the bottom of the stoma.(this will not be possible for a convex pouching system) Unfold the pouch to cover the stoma. **If stents in situ:** Carefully thread the stents through the opening.	Wet skin will prevent the pouch from adhering to the skin. Folding the pouching system in half will allow for a better alignment of the ostomy pouch. To prevent dislodgement of stents.
7. Apply pressure using your finger or a cotton-tip applicator immediately around the stoma to assist with pouch adherence. If taped border, remove tape at this time	This will help the pouching system adhere to the skin preventing leakage. To allow pouching system to adhere to the skin.
8. Ensure tap/spigot is closed	To prevent urine soiling the linen or patient.
9. Hold palm of hand over pouching system for 1 to 2 min to assist with appliance adherence.	The adhesive molds to the skin with warmth and can help to prevent leakage.
10. Remove garbage from patient's room.	To decrease odour.

Changing a Two-Piece Urostomy appliance:

Procedure	Rationale
For a precut appliance: The opening is sized to the client. For moldable pouching systems Stretch/mold the opening and push down until opening is bigger than stoma.	Once the stoma has finished shrinking then a precut pouching system can be used. Moldable technology allows the opening to be rolled larger than the stoma and once applied will return and hug the stoma gently.
1. If required trim edges of the flange, to avoid drains, incisions – off centering of opening may alleviate the need for this.	Flanges may not adhere over staples and sutures or drain sites.
2. Accessory products may be used at this time: a. paste or rings to create a flat pouching surface b. powder and skin sealant to treat skin breakdown See Clinical Decision Grid for Ostomy Accessory Products.	A flat pouching surface is required to enable the flange to adhere and prevent leaking. Contact WOCN/ET if needing further consultation or support. Sitting the patient at 45 degrees helps to make the creases more visible to allow for improved application of accessory products.
3. **Remove backing from flange** If flange has a taped border then leave the tape border on. Remove the tape or plastic from the center of the flange.	The taped border will allow you to hold onto it as the flange is applied to the skin.
4. **Application of flange** Ensure skin is dry. Centre the cut opening around the stoma and apply the flange to the patients skin. **If stents in situ:** Carefully thread stents through opening.	Wet skin will prevent the flange from adhering to the skin. To prevent dislodgement of stents.
5. Apply pressure using your finger or cotton-tip applicator immediately around the stoma to assist with flange adherence. (If stoma active attach pouch and then using your finger or cotton-tipped applicator apply pressure immediately around the stoma through the pouching system)	This will help the flange adhere to the skin preventing leakage. Leakage starts immediately around the stoma, therefore, ensuring the adherence to skin immediately around the stoma is essential. Application of the pouch if the stoma is active will prevent contamination of the flange by urine
6. If taped border, remove tape at this time.	To allow pouching system to adhere to the skin.
7. Ensure tap/spigot is closed.	To prevent urine soiling the linen or patient.
8. Hold palm of hand over pouch for 1 to 2 min to assist with appliance adherence.	To assist with adhesion of the pouching system to the skin as the flange molds to the skin with warmth.
9. Remove garbage from patient/client's room.	To decrease odour.

Expected Client/Family Outcomes

To become independent in emptying and applying the pouching system.

Patient/Client/Resident Education

- Teach the patient/caregiver the above steps at each change until independent with care
- Teach the patient/caregiver how to monitor the skin and when to contact a HCP, etc.
- Explain to patient/caregiver when to contact WOCN/ET
- Educate on normal output, complications, diet, activity, and community resources available
- Educate on the signs and symptoms of urinary infection
- Provide patient care education books to patients:
  (order through Patient Health Education Materials: PHC and VCH)
  - Living with an Urostomy (FP.123.G941)
  - Care of your Ostomy (FK.235.C19)
- Provide patient with list of distributers for ordering supplies as provided by ET/WOCN
- Educate patients on where to purchase supplies
- Educate patients that supplies are purchased by the client and not covered by the Health Care Unit.

Documentation

As per agency policy

References

Colwell, J. C., Goldberg, M. T., Carmel, J.E. (2004). *Fecal & Urinary Diversions Management Principles*. St. Louis: Mosby.

Black, P. (2011) Choosing the correct stoma appliance. Journal of Community Nursing. 25,(6) 44-49.

Burch, J. (2011). The pre and postoperative nursing care for patients with a stoma. British Journal of Nursing, (Stoma Care Supplement). 20, (7), S4-S10

Burch, J. (2005). *Peristomal skin care and the use of accessories to promote skin health*. British Journal of Nursing. 14, (6), 310-318.

Burch, J. (2009). *An update on stoma appliance flanges and base-plates*. British Journal of Community Nursing. 14, (8), 338-342

Burch, J. (2010). Preventing and managing peristomal skin infections and sore skin. *Gastrointestinal Nursing*, 8 (9).

Butler, D, L. (2009) Early Postoperative Complications Following Ostomy Surgery: A Review. Journal of Wound Ostomy and Continence Nursing. 36(5) 513-519.

Fulham, J. (2008). *A Guide to caring for patients with a newly formed stoma in the acute hospital setting*. Gastrointestinal Nursing. 6, 8(), 14-23.

Potter, P., Perry, A,. Basic Nursing: Essentials for Practice, 7th Edition

Hampton, B., and Bryant, R. (1992). *Ostomies and Continent Diversions Nursing Management*. St. Louis: Mosby.

Miller-Keane (1992). *Encyclopedia & dictionary of medicine, nursing, & allied health (5th Ed)*. Philadelphia: W. B. Saunders Company.

Registered Nurses Association of Ontario. (2009). *Ostomy care and management.* Toronto, Canada. Registered Nurses' Association of Ontario.

Vujnovich A (2008) *Pre and post-operative assessment of patients with a stoma*. Nursing Standard. 22,(19), 50-56.

Wright, J. (2008). *Managing retracted stomas*. Journal of Community Nursing. 22(3). 16-21.

Wound Ostomy and Continence Nurses Society. (2010). *Management of the patient with a fecal ostomy: Best practice guideline for clinicians*.

Peristomal Skin Complications: Best Practice guidelines. 2007
http://www.wocn.org/global_engine/download.asp?fileid=88D2D767-5A5F-4A26-8015-72063886A1AE&ext=pdf

Stoma Complications: Best Practice for Clinicians. 2005
http://www.wocn.org/global_engine/download.asp?fileid=DC51BB61-2D22-4B73-8AFC-9F57B163A1EC&ext=pdf

Developed by

CPD Committee: Regional Ostomy Clinicians

Developer Lead: Wound Care Clinician, South Community Health Office, Vancouver - Community

Team members:

ET Wound and Ostomy Care, Powell River, Coastal
ET Wound and Ostomy Care, VGH
ET Wound Care, GPC, Vancouver -Community
WOCN AOA, Vancouver - Community
WOCN Ostomy Care, SPH, PHC
WOCN Pixalere Lead, VCH
WOCN Richmond community
WOCN Richmond Hospital
WOCN Vancouver - Community
WOCN Wound and Ostomy Care, LGH, Coastal
WOCN Wound and Ostomy Care, Spinal cord program, VGH
WOCN Wound and Ostomy Care, VGH

Endorsed by

VCH: (Regional SharePoint 2nd Reading)
Health Authority Professional Specific Advisory Council Chairs (HAPSAC)
Health Authority Interprofessional Advisory Council Chairs (HAIAC)
VCH Operations Directors
VCH Professional Practice Directors

PHC: Professional Practice Standards Committee

Final Sign-off & Approved for Posting by

Chief Nursing Officer & Executive Lead Professional Practice, VCH

Professional Practice Standards Committee, PHC

Date of Approval/Review/Revision

Approved: January 16, 2014

Posted: January 21, 2014