Peristomal Complications
Assessment & Management

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Discussion
- Preamble - The stoma & peristomal area
- Peristomal complications & management

The Stoma
- A surgically created opening for the elimination of bodily waste.
- The bowel is exteriorized & everted onto the surface of the abdomen, exposing the innermost lining, the mucosal layer of the bowel.
- The stoma:
  - Has altered nerve sensation therefore needs protection from hot/cold, pressure & trauma.
  - A healthy stoma will be shiny, red & moist (mucosal tissue).
  - Quick proliferation of mucosal cells (2 to 5 d) This promotes quick healing & in a way is "self-cleaning".

The Stoma
- Often called an ostomy.
- A stoma can change shape & size.
- When the pouch is changed note the shape, size and colour of the stoma. Note also the location and function.
- The patient and the caregivers should know what type of stoma the individual has.
  - 3 common types:
    - Colostomy
    - Ileostomy
    - Urostomy

Peristomal Area
- The area of support for & around the stoma.
- Provides the surface area for the ostomy pouch to hold on to.
- The contour of the abdominal wall can change shape & size.
- Assess during the pouch change for skin integrity, colour, contour and patient comfort.

Peristomal Complications
- Peristomal skin irritation is the most common early complication following stoma creation. (Kann, 2008)
- A 2010 study that followed 89 patients for 1 year after surgery, found 50% experienced peristomal skin complications and most were related to pouch leakages. (Jordan & Christian, 2013)
- Another study suggested that 85% of ostomy patients will experience a pouch leakage at some point in their lives. (Jordan & Christian, 2013)
Peristomal Complications

- The problem may be well advanced by the time the person seeks help.
- Early hospital discharge & laparoscopic procedures result in less time for teaching and supervised practice with a new ostomy.
- The best management of peristomal complications is prevention. (Jordan & Christian, 2013)

Peristomal Complications

What are the impacts?

To the client:
- ↑↑’d pain & discomfort
- poor self image
- social isolation
- diminished QOL

To the health care system?
- ↑↑’d costs & time associated with individual’s care, including supplies

Peristomal Complications

Chemical Irritation

Where to begin?

- Irritant Contact Dermatitis (common)

- Allergic Contact Dermatitis (rare)
  - < 0.6 % are true allergic reactions (Lyon, 2001) (Jordan & Christian, 2013)

Chemical Irritation

- The most common cause of chemical irritation in the peristomal area is the stoma output on the abdominal skin.
- Irritated skin may be at increased risk of allergic reaction due to immune system overstimulation.
  - Once the sensitivity presents, it is usually permanent. Any of the ostomy care products used on the skin could potentially cause a reaction.

Chemical Irritation

- Caused by stoma effluent in contact with the peristomal skin.
- It’s painful. The patient will complain of burning, stinging & itching.
- The skin will look reddened, may have denuded/shallow open areas.
- The stoma output can be seen on the skin when the pouch is changed.
- Complaints of the pouch “falling off”.

(Hopkins & Bryant, 1992)
Irritant Contact Dermatitis

- The irritation mirrors where the effluent was sitting on the skin.
- Gently cleanse the area with warm tap water. Pat dry.

- Measure the stoma, and trace the area to get a fit that includes only the stoma, +/- fistula if present.
- Use fillers to help create a level surface to obtain a reliable seal.
- Dust the stomahesive powder lightly, remove excess. Dab with cavilon wipe. Repeat. This will form a protective crust.

- Containment of the effluent and protection of the irritated skin will allow the area to heal and the dermatitis will resolve.
- Once the area is healed and intact – omit the powder and film barrier treatment.

Allergic Contact Dermatitis

- Presents with:
  - Erythema
  - Burning, stinging & itching
  - May have swelling
  - “Bull’s eye” target appearance
  - Not related to pouch leakages

- Remove the offending product.
- Topical steroidal agent may be needed.
- Can use an interface such as a Coloplast barrier sheet if no other pouching option available.

- Think prevention. Avoid use of unnecessary products that may be potential allergens (baby wipes, personal hygiene wipes, soaps or cleansing products)
- Cleanse peristomal skin with warm tap water.
- Avoid the use of film barriers (no sting, skin prep) or adding additional tape.
Papular Overgranulation

- The number one cause is persistent or recurrent leakage or seepage of the stoma output on the skin.
- Related to inadequate seal around the stoma. Opening too large, wrong shape.
- Also called:
  - Hyperplasia/Hypergranulation
  - Granulomas
  - Proud flesh

Lesions present as red papules occurring at the mucocutaneous junction.
- The tissue is friable and bleeds easily.
- Cutting pouch larger to accommodate, makes it worse.

Treatment
- Assess the shape & size of the stoma
- Evaluate fit of the pouch
- Evaluate the emptying routine, is the pouch being "rinsed" out?
- Weekly application of silver nitrate stick to reduce the overgrowth of tissue.

Silver Nitrate:
- May sting temporarily.
- Clean area with warm tap water & pat dry.
- Roll the tip of the silver nitrate stick over the hypergranulation tissue avoiding any contact with the stoma.
- If the treatment becomes too painful, rinse the area with normal saline. This will deactivate the silver nitrate and the discomfort should quickly resolve. The tissue will have a grayish/white appearance which will slough away.
- Apply appliance as to obtain a good seal.

Pseudoverrucous Lesions

- Wart-like lesions occurring at the mucocutaneous junction.
- May be numerous.
- May be itchy and tender.
- Present in a variety of discolorations from white-grey to reddish-brown.

The cause is chronic exposure to urine in the peristomal area.
- The shape & size of the lesions can mimic the difference between the stoma base and the opening of the pouch.
- Also known as:
  - Pseudoepithelia hyperplasia
  - Chronic papillomatous dermatitis
Pseudoverrucous Lesions

Treatment:
- Correct the chronic exposure to the urine by improving the seal and the fit of the appliance.
- Re-measure the size & shape of the pouch opening to fit 1/8” to 1/16” around the stoma.
- Topical vinegar soaks of 25 to 50% strength will help reduce the growths.
- Ingestion of fruit juice or vit. C supplements to acidify the urine.

Folliculitis

Infection of the hair follicle.
- Presents as reddened, slightly raised pustules, may be draining. Related to traumatic hair removal with pouch removal. Staph or strep infection of the hair follicle.
- Left untreated can progress into an abscess.

Folliculitis

Treatment
- Keep area clean & dry.
- May require antibiotics in a severe case.
- Assess technique for hair removal:
  - Use an electric razor & shave in the direction of the hair growth.
  - Hair removal should be done on a regular basis generally no more than once per week.
  - Clip longer hair with scissors.
  - Can use ostomy protective powder after shaving for protection.

Candidiasis

Predisposing conditions:
- Diabetes
- Immunosuppression
- Topical steroidal agents
- Antibiotic usage

Fungal infection caused by overgrowth of Candida Albicans.
- This organism is part of the normal flora in the mouth, gut & vagina
- Thrives in moist, dark areas.
- Infection presents with a red rash, pustules & satellite lesions, may have a collar/edge with a scaled appearance.

Candidiasis

Treatment
- Short term ↑ in pouch changes to allow for treatment with antifungal powder (Nystatin, Mycostatin)
- Dust area with the powder, massage in, let sit for several minutes and remove any excess.
- Apply the pouch as usual.

Candidiasis

Treatment
- Continue treatment for a few days after the rash has subsided, even if no longer visible.
- Ensure that any moisture is dried from the pouch.
- Prophylactic use of an antifungal powder is not advised.
- Patient teaching.

(Hampton & Bryant, 1992)
Caput Medusae

- Associated with chronic liver disease.
- Presents as purplish discoloration of the peristomal skin.
- Visible dilated cutaneous veins.
- Peristomal bleeding may occur & can be severe.

Treatment

- Identify and manage the underlying disease.
- Gentle pouch removal and care to the area, no rubbing.
- Cautious use of additional products such as convexity, an ostomy belt or extended wear adhesives.
- Instruct the patient how to manage bleeding, apply constant firm pressure X 10 mins, no peeking, if still bleeding then seek medical attention, may need cautery.

Pyoderma Gangrenosum

- A painful ulcerating skin disorder.
- Sometimes associated with inflammatory bowel disease or cancer.
- The ulcers may be triggered by an injury to the skin, such as trauma from a tight appliance or surgery.

Treatment

- The ulcers may be shallow or deep
- They have a bluish undermined and ragged edge
- Surrounding skin tends to be red and swollen
- Healing ulcers result in cribiform scars (these appear to have small holes like a sieve).

Peristomal Fistula

- A complication of Crohn’s disease
- Up to 10% of those with an ileostomy due to Crohn’s will develop a peristomal fistula.
- Include the fistula in the pouch opening.
- Medical treatment for IBD.

Pyoderma Gangrenosum

- Treatment
  - Topical steroidal agent
  - May require systemic steroid therapy
  - OD pouch changes for wound care
  - Reduce or eliminate convexity
  - Pain management
  - Time
Convexity

- **How it works**
  - The outward curve of the convex shape begins at the opening of the barrier and extends to the edge of the barrier.
  - The outward curve of the convex barrier puts pressure around the stoma.
  - This pressure will help the stoma protrude into the pouch.
  - The effluent empties into the pouch rather than under it.
  - The outward curve helps to flatten out creases, indents or hollows.

Parastomal Hernia

- **Protrusion of loops of bowel through a fascial defect in the abdominal wall near or around the stoma.**
- **Presents as a bulge on the abdomen.**
- **May asymptomatic.**
- **May have a fullness, pressure or dragging feeling in the abdomen.**

Parastomal Hernia

- **The hernia is noticeable when the patient is in a sitting or standing position.**
- **Disappears in the supine position.**
- **Have the patient lift their head, the hernia should “pop up”.**
- **Risk of incarcerated hernia, loops of bowel become trapped, leading to bowel ischemia.**

Parastomal Hernia

- **This uneven contour presents the patient with a pouching challenge.**
- **Difficult to maintain a reliable seal.**
- **Thin and stretched peristomal skin at risk for breakdown with pouch leakages.**
- **Increased pressure in the peristomal area due to force of hernia pushing out.**

Parastomal Hernia

- **Prevention through maintenance of abdominal muscle tone and the protection of the abdominal wall in the post op recovery phase. No heavy lifting.**
- **Use of a support belt or binder that fits around the ostomy.**
- **Flexible pouching system that can conform to the bulge.**
- **Avoid constipation.**
- **Stop irrigating if doing colostomy irrigation.**
- **May require surgical repair.**
- **Can recur.**

Pressure Ulcer

- **Increased pressure in the peristomal area related to:**
  - Use of convexity
  - Use of an ostomy belt
  - Presence of a hernia
Pressure Ulcer

- Treatment:
  - Remove cause
  - Re-evaluate pouch
  - Patient education
  - Gentle pouch removal
  - Pain management
  - Provide basic wound care

- Cover the ulcer with a thin hydrocolloid.
- Apply the pouch over the area.
- Temporary ↑ in pouch change to allow wound care.
- Fill the defect with stomahesive powder
- Use no sting barrier film for peri-ulcer protection
- Fill the ulcer with alginate as ulcer exudate and depth dictate.

Pressure Ulcer

1. 
2. 
3. 
4. 
5. 

Trauma

- Other sources of trauma
  - Direct contact/trauma to the area
  - Skin stripping
    - Rough or aggressive pouch removal.
    - Abrasive cleansing technique.
    - The addition of extra tape – whatever goes on, has to come off.
    - Too frequent pouch changes with an extended wear barrier.
- Treatment
  - Eliminate the cause, provide wound care
  - Patient education

Prevention of Peristomal Complications

- Assess the fit of the pouch.
- Re-assess stoma and peristomal area on a regular basis or anytime something changes for the person.
- Cautious use of convexity and accessory items.
- Avoid use of additional tape.
- Avoid picking off old filler or paste, just wash over.
- Patient education.
- Avoid “washing out” the pouch, adds extra moisture to the area.
Thank you!

References