Ostomy Care: Case Study Review

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Objectives

• Brief Historical perspective
• Review of procedures for fecal diversions
• Basic pre-and post operative care
• Case Studies of Complications
  – Stomal necrosis
  – Stomal retraction
  – Allergic Dermatitis
  – Candidiasis
  – Irritant Dermatitis
  – Peristomal hernia
Short Historical Perspective

High mortality rates prior to ostomy surgery

1st planned ostomy surgery took place in 1793

1800 Development of Anesthesia

1900 Hartman’s Pouch

Self maturation of the stoma

1950 Brooke Procedure

Mid 20th Century ET nurse Role
Anatomical Position
Challenging Anatomy
Stoma Construction – End Ostomy
Stoma Construction – Loop Ostomy

- Loop Ostomy
  - Proximal/ Distal
  - Bridge Device
  - 2 openings
  - Generally temporary

[Diagram of Loop Ostomy Construction]
Ileostomy

- **Small Intestine** (*duodenum, jejunum, ileum*)
  - Digestion
  - Absorption

- **Ileostomy**
  - Soft mushy stool
  - Dehydration
  - B12 absorption

- **Pouch**
  - Worn at all times
  - Constant peristalsis
  - Drainable

- **Why?**
  - Inflammatory bowel
  - Protection of distal anastomosis
Colostomy

- **Large Intestine** (*cecum, colon, rectum*)
  - Storage and elimination
  - Water absorption

- **Colostomy**
  - Sigmoid Colon
    - Formed stool
    - Mass movements

- **Pouch**
  - Regulate bowel function

- **Why?**
  - Diverticulitis with perforation
  - Rectal Cancer
Temporary Ostomy
Ileal Anal Anastomosis with J Pouch

- Staged procedure
  - Colectomy/Proctocolectomy
  - Loop ostomy
  - Creation of internal pouch
- Temporary Loop Ileostomy
  - 6-8 weeks
- Last stage provides natural evacuation
  - 6-8 soft stools/day
  - Approx 6 months
Permanent Ostomy - APR
Peristomal Skin

- Healthy, intact with no erythema, rash, or lesions
Goal of basic Pouching

Protect Peristomal skin, clear the mucosa & maintaining a seal for prescribed period of time!
Leakage Assessment and Treatment

Denuded Skin

Note Hydrated Area
Select Appropriate Pouch (Basics)

- **Stoma Protrudes**
  - Flat system flexible or 2 piece with ring
  - Clear stoma 1/16”
  - Paste bead or barrier ring

- **Stoma Flush**
  - Flat flexible pouch or light convex
  - Clear stoma by 1/8-1/4”
  - Flat paste

- **Retracted**
  - Convex
  - Clear stoma by 1/16”
  - Flat paste directly to skin
Crusting Peristomal Skin

1. Dust Area with Stoma Power
2. Gently brush off excess (*powder will stick to denuded area*)
3. Seal in with a “Sting Free” Barrier
Barriers and Paste.

Skin Creases at 3:00 and 9:00
Correct use of paste.
Correct use of Barrier Ring
Belts

• Additional support at 3:00 and 9:00
References


Case Studies
Irritant Contact Dermatitis.

- **Cause/Presentation:**
  - Enzymatic drainage
  - Painful
  - Matches area of leakage

- **Treatment:**
  - Correct cause
  - Assess self care
  - Crusting
Leakage Assessment and Treatment.

Denuded Skin

Note Hydrated Area
Crusting Peristomal Skin.

1. Dust Area with Stoma Power
2. Gently brush off excess (*powder will stick to denuded area*)
3. Seal in with a “Sting Free” Barrier
Irritant Contact Dermatitis.
Astringent Soak.

• Domeboro’s (Burrows Solution)
  – Temporarily relives skin irritation
  – Wet Compress 15-30 minutes (up to q8 hours)
Hydrocolloid Barrier Sheet

Pouch, Belt and Barrier

1 Week Post Treatment
Peristomal Candidiasis.

**Cause/Presentation:**
- Associated with ABX therapy
- Moisture
- Maculopapular rash with satellite lesions
- Pruritis

**Treatment:**
- Antifungal Powder
- Prescription, Nystatin
- OTC, Miconazole 2%
Peristomal Candidiasis.
Necrosis and pouching a bridge.

• **Cause/Presentation:**
  - Death of mucosal tissue
  - Change in color, turgor, hydration
  - 72 hours to post-op

• **Treatment:**
  - Monitor closely
  - Notify Surgeon if deeper necrosis is suspected
  - Control Odor
Stomal Necrosis with Bridge.

Day 5 Post OP

Day 10 Post Op
Pouching a Bridge.
Allergic Contact Dermatitis.

- **Cause/Presentation**
  - Rash that mirrors area of contact
  - Blister formation
  - Pruritis
  - Burning and pain

- **Treatment:**
  - Eliminate allergen
  - Patch test
  - Topical steroids (Kenalog Spray)
  - Crusting
  - Absorbent dressing with hydrocolloid
  - After testing changed product
Allergic Contact Dermatitis.

Initial presentation

4 Days

2 weeks

3 weeks
Patch Test.
Mucocutaneous Separation

• **Cause/Presentation:**
  - Separation of stoma from peristomal skin
  - Tension at suture line
  - Poor wound healing
  - Risk for stenosis

• **Treatment:**
  - Moist wound healing and appropriate pouching
    • Hydrofiber
    • Hydrocolloid
    • Absorptive powder
Mucocutaneous Separation.
Pouching a Prolapse.

• **Cause/Presentation:**
  – Displacement of stoma position
  – Loop Ostomy
  – Lack facial support
  – Obesity
  – Poor muscle tone

• **Treatment/Management:**
  – Manage edema
  – Ensure mucosal health
  – Ensure comfort with pouching
  – Prolapse belt
Pouching a Prolapse.
Peristomal Pyoderma Gangrenosum.

- **Cause/presentation:**
  - IBD
  - Autoimmune
  - Hepatitis
  - Exclusionary testing
  - PAIN
  - Crater formation
  - Violaceous discoloration

- **Treatment:**
  - *Steroids!*
  - Atraumatic moist wound healing (pathergy)
  - Topical analgesics
Pouching a Retracted Stoma.

**Cause/Presentation:**
- Stoma below skin layer
- Tension
- Post-op necrosis
- Thick abdominal wall
- Weight gain

**Treatment:**
- Convexity
- Flat flexible
- Belting
Retracted Stoma.
Pressure Injury.

• **Cause/Presentation:**
  – Punctuate lesion
  – Pain under wafer
  – Rigid or convex wafer
  – Hernia

• **Treatment:**
  – Reduce pressure
  – Hernia belt w/ soft opening
  – Flexible pouching system
Pressure Injury.
Last thoughts ....

• If in doubt  ...
• If treatment doesn’t respond...
• Celebrate the successes ....
• Know when to speak truth ....
References


8. Stelton, Susan MSN, RN, ACNS-BC, CWOCN; Zulkowski, Karen DNS, RN; Ayello, Elizabeth A. PhD, RN, ACNS-BC, CWON, ETN, MAPWCA, FAAN. *Practice Implications for Peristomal Skin Assessment and Care from the 2014 World Council of Enterostomal Therapists International Ostomy Guideline*. 2015 (28) 275-284.