Disclosures

- Dorothy Doughty serves on the Speakers Bureau for Hollister Inc., with focus on peristomal skin protection.
- This presentation is free of promotion or bias.

Goals in Ostomy Patient Management

- Optimal quality of life with resumption of usual activities (including social & sexual activity)
- What that requires
  - Secure & predictable seal
  - Confidence in self care
  - Intact peristomal skin
Current Status

- Tremendous progress in:
  - Surgical techniques
  - Knowledge about best care practices
  - Ostomy products

What Do Studies Show?

<table>
<thead>
<tr>
<th>Source</th>
<th>Rate of Complications</th>
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</table>
| Herlufsen et al 2006 | *Ostomy Skin Study: a study of peristomal skin disorders in patients with permanent stomas.* British Journal of Nursing
|                      | Peristomal complications: 57% ileostomy, 48% urostomy, 35% colostomy |
| Richbourg et al 2007 | *Difficulties experienced by the Ostomate after hospital discharge.* Journal of Wound, Ostomy and Continence Nursing
|                      | 74% Peristomal skin irritation, 62% Pouch leakage |
| McGrath & Porrett 2009 | *Multivariate analysis of complications from intestinal stomata.* British Journal of Nursing
|                      | 46.4% Peristomal complications |

Study Data Cont’D

<table>
<thead>
<tr>
<th>Source</th>
<th>Rate of Complications</th>
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| Nybaek et al 2009    | *Skin problems in ostomy surgery: a case control study of risk.* Acta Dermato-Venereologica
|                      | 45% Peristomal skin problems, 43% Recognized the issue, 16% Sought treatment |
| Williams, J et al 2010 | *Evaluating skin care problems in people with stomas.* British Journal of Nursing
|                      | 77% “sore skin,” 54% had more than 1 complication, 60% itchy skin |
| Sahadadnna, G. 2013  | *The incidence of stoma and peristomal complications during the first 3 months after ostomy creation.* Journal of Wound, Ostomy and Continence Nursing
|                      | 69% peristomal skin complications |
What Do WOC/ET Nurses Report?

- 2014 survey* (757 North American nurses):
  - 68% of participants estimated 50 – 100% of their patients develop PSCs
  - Most WOC/ET nurses in acute care setting: impact on data

*OCC Events Sponsored by Hollister

Impact on Quality of Life: Study Data

- Health utility score:* ranges from 0.0 (death) to 1.0 (perfect health)
- Survey of 1938 adults, average score for adult without ostomy = 0.754
- Average score for adult with ostomy and intact peristomal skin = 0.754

*n = 1938, Hollister data on file

Impact PSCs on QoL: Study Data

- Mild PSCs reduce health utility score to 0.697
- Moderately severe PSCs reduce score to 0.647
- Severe PSCs reduce score to 0.589
- Score for pt with severe heart failure: 0.60

Impact PSCs on QoL: Patient Reports

- Patient questionnaire* with >200 responses
  - 92% experienced leakage
  - 84% experienced skin irritation
  - 66% wanted information on causes of leakage/irritation

*Hollister Secure Start™ Survey 2015

Data re: Leakage

- Global study: 19% reported leakage “often” or “always”
- USA study: 62% experienced pouch leakage after discharge from hospital
- UK study: 57% reported daytime leakage

Patient Recognition of PSCs

<table>
<thead>
<tr>
<th>Source</th>
<th>Rates of Recognition of PSC</th>
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</thead>
<tbody>
<tr>
<td>Herlufsen et al 2006</td>
<td>38% Patients who agreed with finding of skin problem</td>
</tr>
<tr>
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<td>20% Patients sought medical help</td>
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<td>Nyboe et al 2009</td>
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<tr>
<td>Williams et al 2010</td>
<td>84% of patients described peristomal skin as “very” to “fairly good”</td>
</tr>
<tr>
<td></td>
<td>Research team determined only 32% had healthy peristomal skin</td>
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</table>
Challenges to Peristomal Skin Health

- Potential exposure to stool or urine
- Repetitive application and removal of pouching system (microtrauma)
- Potential sensitization to ostomy care products
- Continuous occlusion: ??? impact on skin health

Impact of Peristomal Complications

- Clinical
  - Pain and itching
  - Difficulty maintaining secure & predictable pouch seal (vicious cycle)
- Reduced Quality of Life
  - Leakage, odor, and embarrassment: top concerns for patients
  - Increased cost of care/supplies

Common Types Peristomal Skin Damage

- **Peristomal MASD** (Moisture Associated Skin Damage)
  - Damage due to excessive moisture +/- enzymatic damage
  - **Acute and chronic irritant dermatitis**
    - Maceration and skin overgrowth
    - Candidiasis
Peristomal MASD

- Clinical Effects
  - pain, burning, itching
  - denudation
  - leakage/increased frequency pouch changes
  - increased cost of care

Common Types Peristomal Skin Damage

- MARSi (Medical Adhesive Related Skin Injury)
  - Damage to skin caused by mechanical removal adhesive pouching system
    -- Folliculitis
    -- Tape stripping
    -- Product sensitivity

Peristomal MARSi

- Clinical Presentation
  - Possible patchy areas skin loss
  - Itching, tenderness common
  - Product sensitivity: blistering, follows footprint of offending product
  - Leakage/increased frequency pouch changes
  - Increased cost of care
Factors Contributing to PSCs
- Poor fit/inadequate seal between barrier and skin (impact of obesity, unmarked stoma site)
- Suboptimal choice of barrier type/formulation
- Incorrectly sized opening in barrier
- Inappropriate frequency and/or technique for pouch change

Prevention PSCs: Essential Strategies
- Well-constructed stoma & flat pouching surface
- Appropriate pouching system: consider “fit” and “formulation”
- Correctly sized opening/appropriate frequency of pouch change

Well-constructed stoma and flat pouching surface
- Pre-op stoma site marking/collaboration with surgical team to assure optimal stoma construction
- Barriers (AM admits; belief that stomas should be “flat”)
- Strategies
  - Surgeon education/collaboration
  - Collaboration with preadmit clinic staff
**Appropriate pouching system: good “fit”**

- Protruding os/flat pouching surface:
  - flat pouch (1-pc or 2-pc)
- Stoma in deep crease:
  - all-flexible pouch (usually 1-pc)
- Stoma in shallow crease: flexible vs convex
- Stoma in valley or skin level stoma:
  - convex system usually best option

**Assuring a good “fit” between pouch and skin**

- Convexity: increasing needs/increasing options
- Indications:
  - Stoma in concave “valley” (to provide good “match” between barrier and skin)
  - Os at or below skin level (to provide support/reduce risk of undermining)

**Convex Product Selection**

- Precut vs cut-to-fit or moldable
  - Cut to fit or moldable: better for irregular stoma; better stock item (meets multiple needs)
  - Precut: better support right around stoma
- “Add on” (convex barrier ring) vs integrated
  - Add on good for concave surface with protruding os
  - Integrated more appropriate for skin level os
Selecting Convex Products

Product Selection: Good “Fit”

- Use accessory products when necessary
  - Rings, strip paste, tube paste
  - Additional adhesive
  - Belts and binders

Product Selection: Barrier Formulation

- Select barrier that provides desired level of protection (resistance/absorption)
  - Regular wear
  - Extended wear
  - Infused barrier
  - Consider usual wear time/skin status
Product Selection: Barrier Formulation

- **Standard wear barriers (pectin/gelatin/CMC, etc)**
  - Good for solid/mushy stool
  - Good choice for pt who changes pouch frequently
- **Extended wear barriers (higher concentration pectin)**
  - Much better resistance to liquid stool/urine
  - Good choice for pt who changes pouch less frequently

Infused Barriers:

- **Purpose/Goal:** Improve peristomal skin health/resistance to damage
- **Types**
  - Manuka Honey (Welland)
  - Aloe Vera (Salts)
  - Ceramide (Hollister; ALCARE)

Ceramides in Skin
Assure Optimal Fit and Formulation

- Impact ceramide-infused barriers
- Results to date suggest resolution of acute/chronic irritant dermatitis and enhanced peristomal skin health
- Represent another option in our box of "tools" for prevention of PSCs and improved QoL for ostomy patients

Assure Appropriate Pouch Opening and Pouch Change Frequency

- Patient/caregiver education essential!
- Appropriate frequency pouch change
- Indications for PRN pouch change
- Correct sizing and application
- Importance of appropriate removal technique & gentle skin care
- Recognition and response to a problem (PSC)

Conundrums and Challenges

- WE Now Have:
  - Excellent Products
  - Skilled and Knowledgeable WOC/ET nurses
  - BUT
  - High incidence of leakage and skin complications --- WHY???? and What Can we Do?
Getting Better Outcomes: Identify Barriers

- Must consider "systems issues" that interfere with "best practice" and "best outcomes", i.e., factors that reduce patient access to needed products and/or WOC/ET nurse expertise.

Best Practice/Ideal Patient Experience

- Preoperatively
  - Preop teaching to assure informed consent and establish rapport
  - Stoma site marking
  - Provided by WOC/ET nurse

Best Practice/Ideal Patient Experience

- Postoperatively/Acute Care
  - Establishment effective pouching system
  - Instruction in self care and peristomal skin care
  - Basic education re: dietary/fluid modifications
  - Support for beginning adaptation
  - Provided by WOC/ET nurse & knowledgeable staff nurses
Best Practice/Ideal Patient Experience

Post-Discharge:
- Home Health assistance provided by nurses knowledgeable in stoma care, who can modify pouching system as needed (given probable changes in stomal height, abdominal contours, and output) and who can reinforce teaching

Long-Term: Follow-up care available on scheduled and "as needed" basis in outpatient clinics
- Pouching assistance
- Ongoing education
- Rehabilitative support

Issues and Challenges

- Preoperative care
- AM admits
- Emergent cases
- No advance notice of elective cases
Issues and Challenges

Acute Care
- Shortened length of stay/ERAS
- Ability to establish appropriate pouching system limited by abdominal distention & stomal edema
- "So much to teach/so little time" – and patient frequently sedated or overwhelmed

Post-Discharge Care: Home Health/Community Care Support
- Huge need for community care provided by nurses knowledgeable in stoma care
- Very limited numbers of WOC/ET nurses in community; most care provided by non-specialty nurses

Long-term support
- Limited numbers outpatient clinics for ostomy patients
- Limited numbers WOC/ET nurses in outpatient care
### Challenges: Solutions

- **Pre-op care**
  - MD education to increase support for preop care (use of joint position statements on stoma site marking)
  - Coordination with preadmit clinics
  - Designated/trained “stoma site markers”

### Challenges and Emerging Solutions

- **Acute care setting**
  - Use of CCTV
  - Every care session a teaching session (e.g., all staff involved in teaching how to empty)

- **Written materials**
  - Videotaped teaching sessions?

### Challenges: Solutions

- **Post-Discharge: Emerging Solutions**
  - Increased use of transition support programs provided by industry (e.g., Secure Start)
  - Outreach/education for Home Health nurses providing ostomy care
  - Targeted referrals for ostomy patients (to HH agency with ostomy nurse)
Creative Solutions to Care Across the Continuum: Think Outside the Box

- Use the Internet!
  - Study done by Pittman and Rawl*
  - Purpose: to evaluate use of web-based resources for ostomy patients

Poster at WOCN/CAET Joint Conference, Montreal 2016

Internet as Resource

- Key Study Findings:
  - 48% of patients reported using Internet for information re: ostomy
  - 75% felt confident they could find needed info on Internet
  - 82% found information easy to understand
  - 85% said Internet-based information helped them understand their ostomy care

Creative Strategies to Increase Patient Awareness PSCs

- Take a Look® Educational Program
  - Assessment cards: Normal skin vs PSCs
  - Reminder cards: Assessment checklist + reminder WOC/ET nurse availability for assistance
  - Treatment booklet
  - Patient USB with pre-loaded info

Jo Hoeflok, BSc, MA, RN CEN
Tools for Involving Patient and Tracking His/Her Progress

Summary

- Positive ostomy patient outcomes
- Correctly fitted pouching system
- Best barrier formulation
- Ongoing education/adaptation
- "Systems" skills + clinical skills
- "Outside the box" thinking (WOC/ET trademark)