MANAGEMENT OF DIFFICULT STOMAS
(Study Guide: Core Content)

I. Introduction

- Increasing numbers of patients with difficult stomas, due in large part to increasing incidence of morbid obesity; as explained previously, morbid obesity reduces mobility of mesentery and makes it difficult to pull the bowel to the desired location. In addition, the surgeon can only “trim” about 7 cm of mesentery without risking stomal necrosis; if the abdominal wall is > 7 cm in thickness, the anastomosis between the stoma and the skin will be under tension and the stoma will be retracted with dimpling of the peristomal skin.

- In managing difficult stomas, must use following pathway:
  - Select pouching system that is the best possible “match” to the patient’s abdominal contours (flexible pouch usually best option for deep creases, convex pouch usually best option for skin level or retracted stoma, “flat” pouch usually requires fairly flat pouching surface and stoma with slight protrusion)
  - Use filler products as needed to create smoother pouching surface
  - Add accessory products that provide increased adhesion/support (adhesive products, belts, binders, support undergarments)
  - Initial goal: obtain a secure, reliable seal for minimum of 24 hours (hopefully more!)

II. Types of Problems/Possible Solution

- Flush/retracted stoma.
  - Convexity is usually helpful
    - If convex pouch used, order opening 1/16 – 1/8” larger than stoma so convexity just clears stoma but provides support to the immediate peristomal area.
If flush/retracted stoma is in or adjacent to a deep crease, would need soft convexity in order to provide conformability to the abdominal contours; should size to fit the stoma.

Alternatively, could use flat flexible pouch to conform to the deep creases. If flat flexible pouch used, should size pouch opening to “clear” stoma by 1/8 - 1/4” to reduce the risk of undermining, i.e., urine or stool “tracking” between the barrier and the skin.

- **Belts and binders** are helpful. Belts add support @ 9 o’clock and 3 o’clock; binders provide circumferential support. (Note belts are beneficial only if the stoma is close to a “belt plane” such as waistline; otherwise belts tend to pull pouch toward belt plane; binders more effective when stoma not in belt plane).

Primary vendor for binders is NuHope – they have a variety of options in terms of binder fabric and binder width; they can size the opening in the binder to “match” any vendor’s pouch; just need to tell them which pouch the patient is wearing.

**Note:** Binders are much more effective when used in conjunction with pouching system that has a flange and/or belt tabs; the binder needs to “lock in place” around the flange and under the belt tabs to prevent the binder from “riding up”.

If best pouching system is an all-flexible system, usually better to use a support undergarment with a customized opening for the pouch – NuHope will do this for unworn garments for $20.00.

- **Irregular Abdominal Contours**

  **Deep peristomal creasing.**

  - If stoma protrudes. Use flat flexible system so pouch can “fold” with patient. If creasing occurs only on one side, consider the use of barrier strips/wedges to create an even pouching surface.

  - If stoma skin level or retracted, consider soft convexity.
Shallow peristomal creasing

- Firm convexity may be helpful if the convexity “matches” or helps to eliminate the creases. Example: patient with retracted stoma in a shallow “crease” may benefit from a firm pouch with oval convexity, if abdomen is soft; usually need to add belt for additional support.

- Soft convexity or flat flexible pouch may be better option if abdomen firm.

- May need to try both a convex system and an all-flexible system to determine which is “best.”

Multiple skin wrinkles.

- If abdomen firm, use flexible system (e.g., Cymed Microskin; Karaya ring pouch; two-piece system with narrow barrier ring and flexible tape border).

- If abdomen soft, use system with firm faceplate that supports the skin/tissue around stoma in a stretched position.

Gullies/defects.

- Fill with barrier paste (small defects) or moldable barrier wedges/straps (large defects).

III. General Measures to Improve Pouch Seal

- **Barrier paste or rings** to reduce undermining

- **Contact adhesive (e.g., NuHope Adhesive, Skin Bonding Cement by Torbot, or Hollister Adhesive Spray)** to increase adhesion.

  Hollister Medical Adhesive Spray is easiest to use – can just instruct patient to remove paper backing from pouch, spray back of pouch with adhesive spray, and wait for 1 – 2 minutes.

  NuHope Adhesive and Torbot Skin Bonding Cement come with an applicator-- apply to back of pouch and wait 1 – 2 minutes for solvents to evaporate; for best results apply a layer of cement to both the pouch surface and the peristomal skin surface. (NuHope is latex free; Skin Bonding Cement is latex based.)

- **Belts/binders** to stabilize pouching system in position against abdomen
IV. Options for Adding Convexity with a Disposable System

**Benefits of Convexity:** Reduces undermining; reduces stoma retraction; provides support for soft abdomen

Note different levels and forms of convexity

- **Low level convexity** primarily beneficial for skin level stomas (to minimize undermining) and for patient with soft abdomen (to provide support)

- **Deep convexity** needed for stomas located in deep valley (need convexity that “matches” the concavity of the abdomen)

- **Oval convexity** best option when the creases are at 9 o’clock and 3 o’clock

**Companies Providing Convex Products**

**Hollister**

1-piece and 2-piece pouches with built-in convexity, round only

Provide both firm and soft convex pouching systems

Convexity is **low level** so most appropriate/beneficial for skin level stomas

Also provide *Adapt Convex Rings:* very helpful accessory item that can be attached to the barrier surface of the pouch prior to application to the patient; can be added to a flat barrier surface to create convexity or can be added to a convex barrier surface to increase the level of convexity. One potential disadvantage: thickness of barrier ring can cause drainage to “pool” within barrier ring and then to undermine the barrier. – this is a problem if the stoma empties at skin level or below but is *not likely* to be a problem if the stoma protrudes

**ConvaTec**

1-piece and 2-piece pouches with built-in convexity, round only

Convexity is **low level** so most appropriate/beneficial for skin level stomas Available in precut and moldable forms

Also provide convex inserts for 2-piece Natura Sur-Fit system: thin plastic rings that are snapped inside the flange of the barrier wafer to add **very low level convexity** (they are
somewhat difficult to snap into the flange and they add very little convexity so they are not frequently used—were used prior to advent of systems with “built-in” convexity)
Note: External diameter of insert must match flange of wafer; internal diameter of insert must “clear” stoma by 1/8”

**Coloplast**

1-piece and 2-piece pouches with built-in convexity, round only (but do have some cut-to-fit systems with convexity so could cut in oval pattern*). Provide both soft and firm convex pouching systems

**Note:** Cut-to-fit convex systems provide much less support than presized convex systems – with presized convex systems the ring creating convexity is right around the opening in the wafer so you get support right around the stoma. With cut to fit systems the ring creating convexity is further away from the edge so you get less support. (Will demonstrate in class)

**Various levels of convexity available ranging from low to mid-level**

**Marlen**

1-piece and 2-piece pouches with built-in convexity (with 2-pc system, pouch attaches to flange via adhesive mechanism)
Available in various levels of convexity **ranging from low to deep**
Available in both **round and oval**
Combines convexity with flexibility; may not be flexible enough for deep creases but would be good choice for patient who needs some convexity because of a skin level or retracted stoma but also needs some flexibility because of firm abdomen

**NuHope**

1-piece pouches with built-in convexity
Available in both **shallow and moderately deep convexity**
Available in both **round and oval**
Adhesive foam surface beneficial for some patients because it doesn’t “melt down”
Available both in “firm” and “semi-flexible”

**NuHope will also custom-cut disposable pouches for patients with difficult abdomens, multiple stomas, etc.** (they provide a kit you can use to make a “mold” of the patient’s abdomen – they use this to create a customized pouch.)
V. Problem-solving Pathway

- Remove pouch and look at “skin side” to determine location/patterns of meltdown/leakage
- Evaluate patient in lying and sitting positions to determine location of any creases/peristomal surface irregularities and to determine presence/severity of retraction
- Note effects of peristalsis on stomal height (does stoma retract to skin level or below with peristalsis?) and also note point at which stoma empties (e.g. if stoma empties at 6 o’clock and that point on the stoma is at skin level, you will need convexity to compensate)

--Based on assessment, determine type of pouch that is “best match” for abdominal surface

- In general, need convex pouch for skin level or retracted stomas and need flexible pouch for stomas in deep creases. For stomas in shallow creases, may need to try both an all-flexible and a convex system to determine which the best match is.
- Use filler products as needed to create smoother flatter pouching surface
- Add adhesives and/or belts/binders as needed to provide additional support
- “Tweak” system as needed based on location of any “leaks”

If you cannot come up with an effective pouching system, need to consult surgeon regarding possible revision (if you can reasonably expect better outcomes following another surgical procedure.) For example, if you have a patient who has a retracted stoma because he weighed 375 lbs at the time of surgery and he still weighs 375 lbs stomal revision is unlikely to be of help. However, if the stoma is retracted and in a crease because the patient was critically ill and the surgery was emergent so the patient did not get marked preoperatively and because there was mucocutaneous separation followed by retraction – but the patient is now healthy and could undergo a planned procedure – a revision WOULD be indicated.