Colostomy can not reach the skin !

BY

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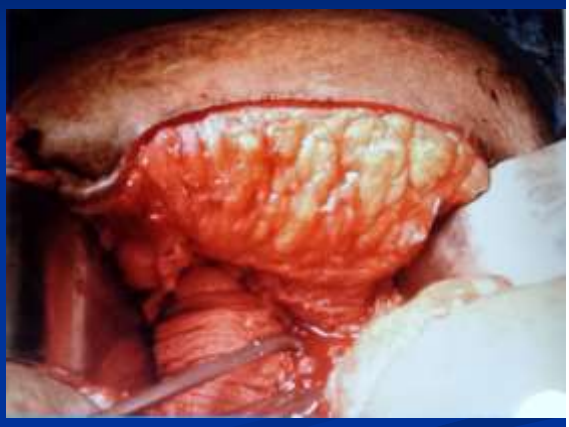
How can we get this stoma through out this skin ?



Of course, this a difficult situation in the operating room.

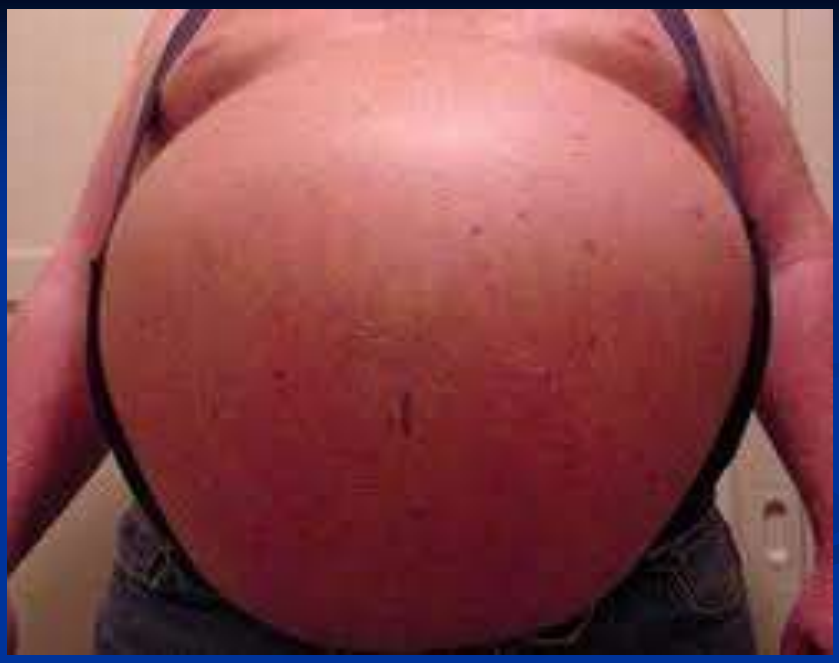
This difficult situation could be understood if we imagine this patient:

- 65 years old man.
- Of BMI ≥ 40 .
- Diabetic with CHF.
- Perforated diverticulitis.
- Previous laparotomies.
- Septic with peritonitis.

Now, **Get the idea !!**

The difficult stoma

- **Inflamed,thickened,foreshortened mesentry** due to prior operation or inflammatory changes.
- **Obesity** → thick abdominal wall and poor tissue quality.
- **Distended colon.**
- **Epiploic appendages.**

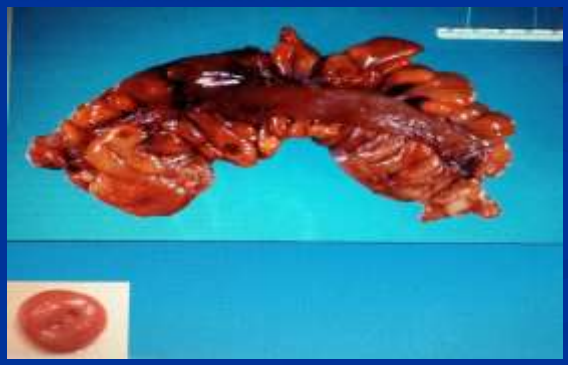


Obesity and stoma creation

- **Increased depth of skin creases causes pouching difficulties** , even in properly constructed well located ostomies.
- **Difficult to identify the rectus muscles preoperatively.**
- **Obese patients can not see their lower abdomen.**
- Thicker abdominal wall adipose tissue requires **increased amount of length of mobilization.**

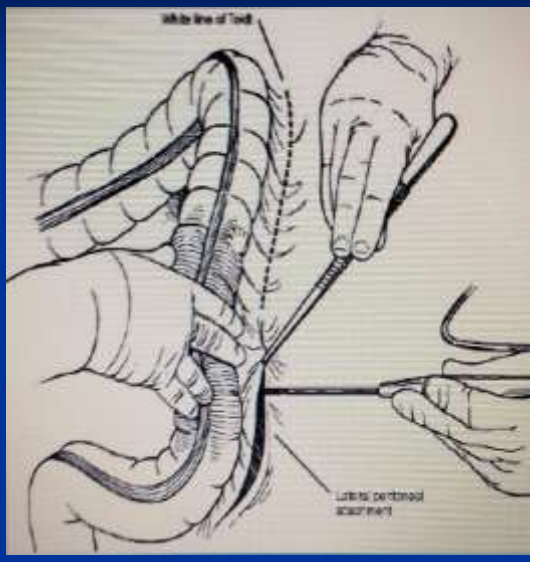
Tips for success:

- Avoid a stoma if at all possible.
- Excise all inflamed sigmoid colon.
- Segment used for stoma must be free of inflammation.



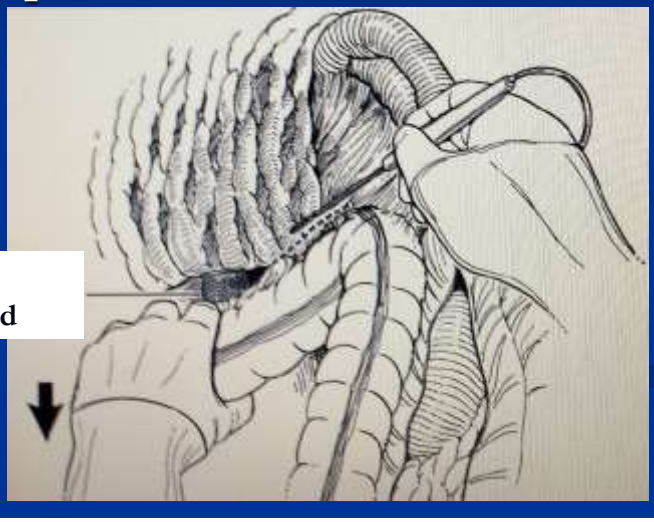
Difficult end colostomy, how could we deal with this situation??

- Take down left lateral peritoneal reflection fully.
- Transect medial peritoneal attachments to left mesocolon.



Difficult end colostomy, how could we deal with this situation??

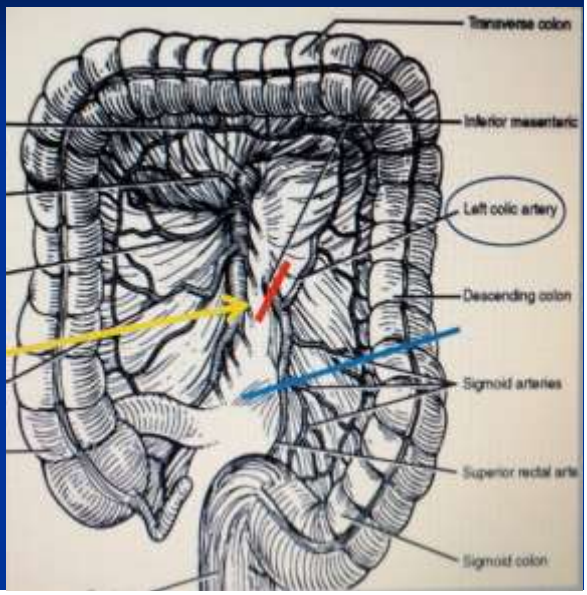
- Mobilize splenic flexure.



Gastrocolic ligament incised

Difficult end colostomy, how could we deal with this situation??

- Divide IMA/IMV if necessary.
  *Must have good pulse in marginal artery.
  *Stay proximal to left colic.



Difficult end colostomy, how could we deal with this situation??

- Windows: create widows through the peritoneum of left mesoclon.

Difficult end colostomy, how could we deal with this situation??

- Windows:

* Useful for providing extra length.

* Careful not to devascularize the colostomy.

Difficult end colostomy, how could we deal with this situation??

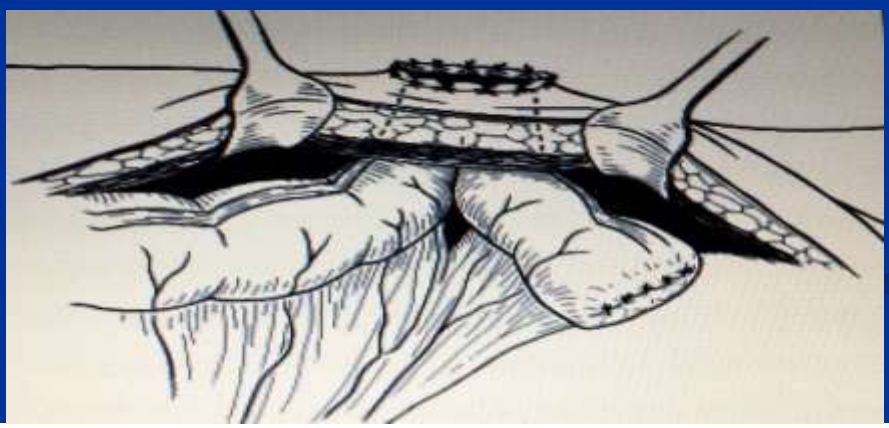
- Bigger hole:

* Expand fascial aperture or skin edge.

* Remove subcutaneous tissues.

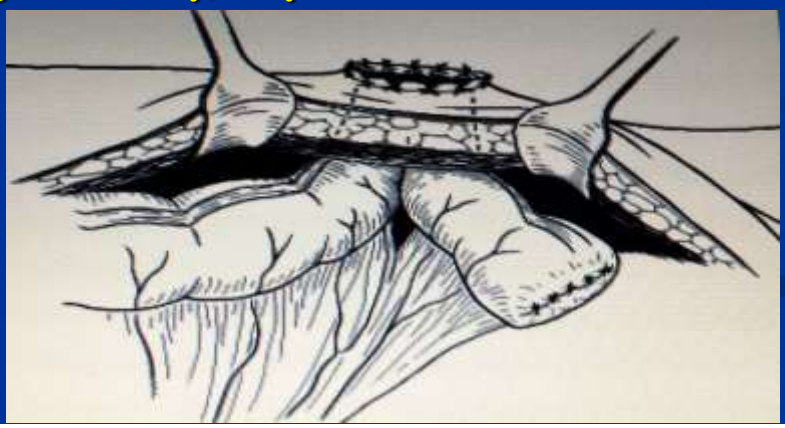
Difficult end colostomy, how could we deal with this situation??

- Psudoloop:
  - Herbert et al, maturation of antimesentric border of colon.



Difficult end colostomy, how could we deal with this situation??

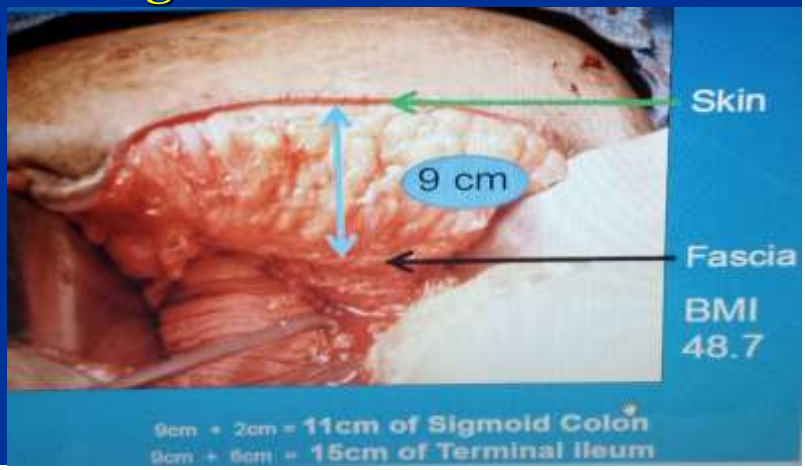
- Psudoloop:
  - No Brooking, often ends up at the skin level..
  - Emergencies only, only when no other stoma reach.



Difficult end colostomy, how could we deal with this situation??

- Thinner Wall:

How can we get a thinner abdominal wall ??



Difficult end colostomy, how could we deal with this situation??

- Thinner wall could be achieved through **abdominal wall modification by :**

1) Lipectomy:

Meguid (1997),described a technique of excision of subcutaneous fat to reduce abdominal wall thickness

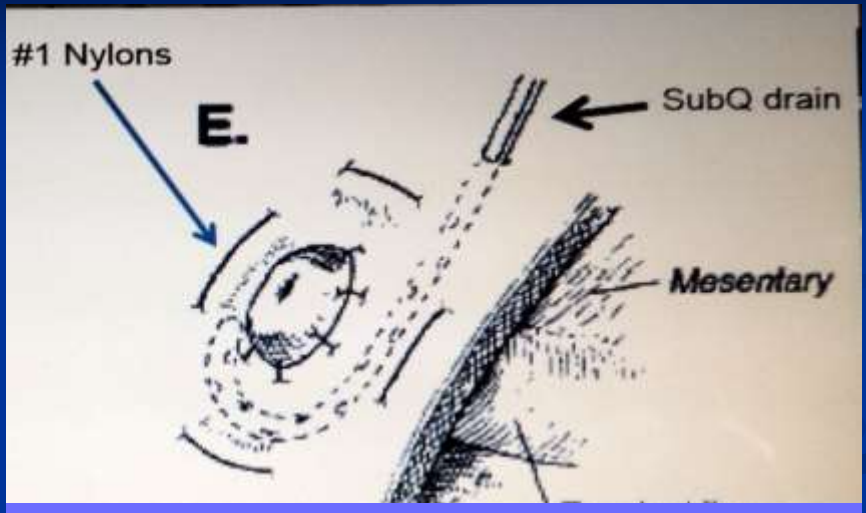
Difficult end colostomy, how could we deal with this situation??

- Thinner wall could be achieved through abdominal wall modification by :

1) Lipectomy:

Despite of initial difficulty with stoma appliance (as a results of loss of convex contour of abdominal wall that may lead to pouching issues), This operative technique in selected obese patients outweighs the limited complication that may encountered.

Difficult end colostomy, how could we deal with this situation??



Lipectomy as described by Meguid (1997)

Difficult end colostomy, how could we deal with this situation??

- Thinner wall could be achieved through abdominal wall modification by :

2) Liposuction:

Margulies elucidated a technique of stomal extraction. peristomal suction lipectomy for removal of excess fat during stomal extraction.

Difficult end colostomy, how could we deal with this situation??

- Thinner wall could be achieved through abdominal wall modification by :

3) Flaps:

Functionally better than lipectomy because of restoration of flat abdominal wall, but have a risk of potential flap necrosis.

How could we limit the friction of colostomy during its extraction??

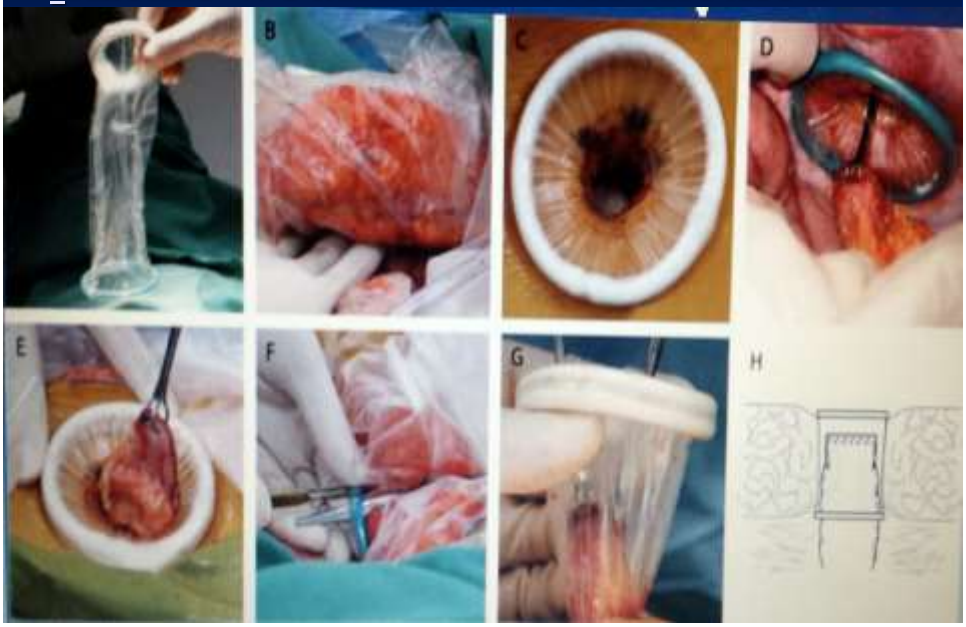
1) Stuff bowel into 1 inch Penrose drain and slide through the trephine (mavroidis,1996). However, there is a difficulty to pass a bowel into drain.
2) Glove cuff technique: pass the bowel through a sleeve of sterile glove(size 5½).

How could we limit the friction of colostomy during its extraction??

3) Alexis wound retractor method:

- ✓ Described by Meagher et al 2009.
- ✓ Small Alexis (2.5-6 cm) inserted and wound retracted.
- ✓ Colon passed through the wound retractor.
- ✓ Inner (green)ring is divided & plastic sheath is cut off & slides out to leave colon in perfect position.

_Alexis wound retractor method



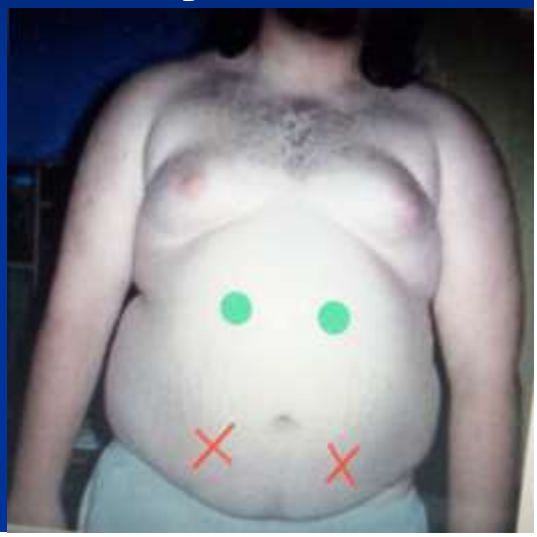
Benefits of using Alexis wound retractor

- ✓ Small size of aperture with less tissue damage/bruising.
- ✓ Reduce the incidence of retraction and parastomal hernia.

Go North in obese young man

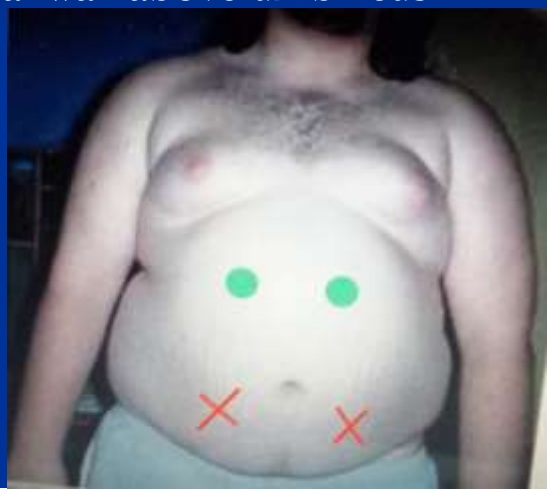
In obese patients supraumblical placement of stoma is desirable.

Why?



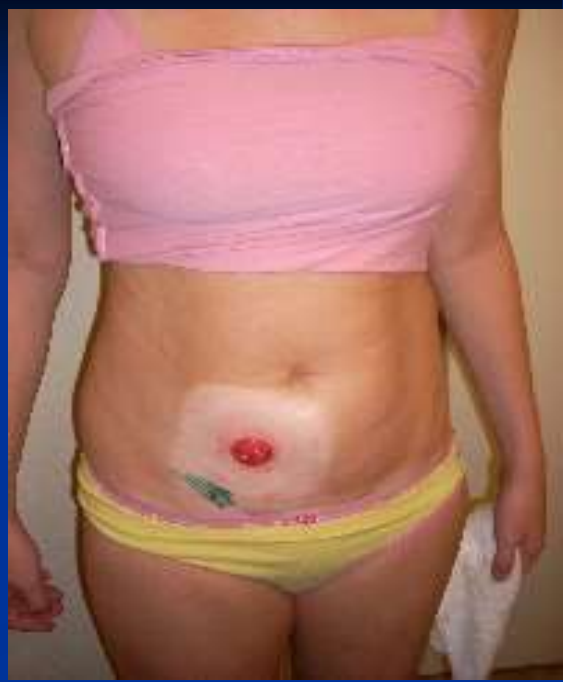
Go North in obese young man

- ✓ Improve pouching.
- ✓ ↓ skin irritation.
- ✓ Thinner abdominal wall above umbilicus.
- ✓ Patient can see it.



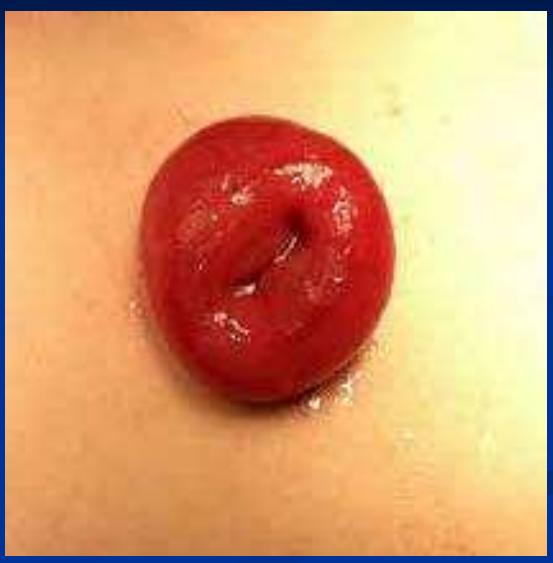
Remember !

1) Preoperative planning , operative technique and postoperative education are of vital importance to have a nice stoma.



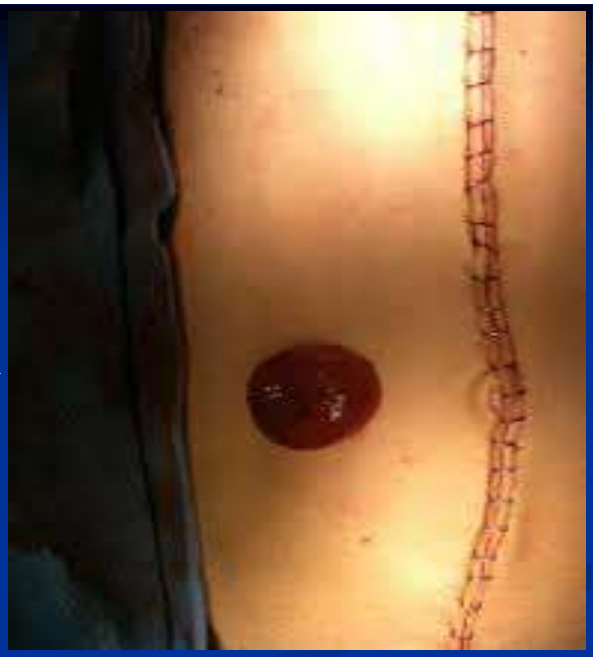
Remember !

2) Make every stoma as though it were going to be permanent



Remember !

3) Better to create an ugly stoma in a good location than a pretty stoma in an ugly location



Perfect stoma in imperfect location

Thank you