**Stomas**

**Definition**: opening of hollow viscus to outside

**Classifications:**
- Temporary or permanent
- Involved organ
- **Configuration:**
  - Loop (post wall is maintained)
  - Double barrel (divide the whole circumference, ending up with two openings)

**The reason for it:**
- Protective for anastomoses (no stool passing through it to allow healing),
- Decompression of distal obstructive recto-sigmoid tumor

So, the stoma name can include all of these classifications: e.g.:
- Temporary protective loop ileostomy
- Decompressive transverse loop colostomy

**Side note:** If the proximal opening in a double barrel stoma serves the point of a stoma (where food exists from), why don’t we close the distal opening?

To release a distal obstruction, if you leave it close -> you end up with a closed loop -> pressure increases due to mucus build up and gas fermentation from bacteria -> perforation. The other non-functioning end is called a mucous fistula

**Side note:** In cases of distal tumor causing obstruction -> do an emergency decompression stoma instead of doing an oncological resection of the tumor, why?
- Risk of leak
- Not giving the pt a chance at neoadjuvant, which can lower the recurrence
- The pt might have synchronous tumor, which if discovered pre-op, would change the resection plan

**Figure 98-3** Examples of decompressing, diverting, or evacuating stomas. A, End stoma (insert shows typical maturation). B, Double-barrel stoma. C, End-to-side anastomosis with distal vent for irrigation. D, Side-to-end anastomosis with proximal vent. E, Loop stoma. F, End stoma with closed subfascial distal of the end of the intestine (insert shows rodless end-loop stoma).
Where to put the stoma?

✓ In rectus sheath (to give support)
✓ Away from bony prominence (for the stoma’s appliances to fit nicely)
✓ Away from main laparotomy scar (so that stool won’t contaminate surgical site)
✓ Away from active skin lesions and prev scars
✓ Away from skin creases (in non-emergency - mark the stoma site pre-op with the pt laying down and standing up so the pt can see it both supine and erect)

Complications:

✓ Acute
- Necrosis: always due to a technical problem; twisting of the mesentery or it’s under tension -> leads to leaking of the dead stoma
- Hematoma
- Bleeding

✓ Consequences of the stoma:
- Fluid electrolyte imbalance
- Skin excoriation and irritation
- Parastomal herniation
- Stoma prolapse of the mucosa
- Retraction
- If ischemia (not severe acute enough to cause necrosis) -> fibrosis -> stenosis

Once the pt is off muscle relaxants -> back to resting position -> the stoma retracts

CASE: Parastomal hernia pt, operated 2 yrs ago. What’s the first question you need to answer?
- Does this pt still need the stoma?
- Parastomal hernia can be a killer and easily missed, esp in obese pts
**Enterocutaneous Fistula**

- Abnormal communication between 2 epithelialized surfaces

**Factors affecting spontaneous closure [FRIENDS]:**

- Foreign body
- Radiation
- Inflammation (e.g. IBD) or infection (sepsis; local\systemic)
- Epithelialization of fistula tract
- Neoplasm
- Distal intestinal obstruction
- Steroids

**Q: 2 fistulas, one is 2 cm, the other is 10 cm. Which fistula will heal faster?**

- *The longer one is more likely to heal faster, why?*

  1. **Epithelialization**
     - The shorter one is more likely to fully epithelialize, while the longer one will have the 2 ends epithelialized and the middle part will collapse

  2. **Pressure**
     - Short -> high pressure -> stays open
     - Long -> low pressure -> more likely to collapse -> fibrosis

- Two types of fistulas: high and low output -> not an independent factor in predicting spontaneous closure

**References:**

- Dr Alabeidi’s lecture and clinical notes