

CLINICAL SKILLS: STOMA EXAMINATION

Definition: Stoma means 'mouth' or 'opening'. In medicine, it indicates that there is an artificial opening through to an external surface. Common scenarios are when the gastrointestinal or urinary tract are brought through the abdominal wall to allow for removal of waste products. When examining these stomas, it is important to be able to distinguish the [type](#) of stoma and to look for [complications](#). This could be a whole station in an OSCE, or could form part of the abdominal examination - read the question carefully!

- Wash hands
- Introduce yourself and confirm patient's identity
- Ask permission to examine patient
- Expose abdomen fully
- Reposition patient lying down

Inspect:

- Around the patient
 - Drugs e.g.: loperamide
 - Stoma care pack
- The patient as a whole
 - Comfortable?
 - Appear clinically 'dry'? (high output stoma)
- Hands
 - Dry?
 - Capillary refill time (CRT)
 - Pulse rate and character
- Eyes
 - Moist mucous membranes?
- Mouth
 - Moist mucous membranes?
- Abdomen
 - Ask patient to cough - is there a parastomal hernia?
 - Surgical scars (may help indicate the type of previous surgery)
 - Location of stoma (suggestive of type, but **not** a definite answer!)
 - RIF - ileostomy, LIF - colostomy
 - Contents of bag
 - How much, what colour, liquid or solid
 - Liquid, green/yellow contents is in keeping with an ileostomy
 - Firmer, brown contents is in keeping with a colostomy
 - Watery, clear/yellow fluid is in keeping with a urostomy
 - Stoma formation
 - Is there a spout above the skin (?ileostomy) or is it flush with the skin (?colostomy)
 - Does the tissue of the stoma look pink and healthy?
 - Lumen
 - One or two? (see below for differences)
 - Ask patient to cough
 - Look at stoma and surrounding abdominal wall for a protrusion on coughing
 - Skin surrounding stoma
 - Redness or rash (allergy to bag? leakage of contents?)

Palpate:

- Around the stoma - ask patient to cough in order to feel for a parastomal hernia
- Ask if you can remove stoma bag to inspect more fully (removing the bag would probably be inappropriate in an exam)

Auscultate:

- Listen for bowel sounds - if absent ?obstruction

To conclude the examination:

- Do a full abdominal examination
- Do a rectal examination
- Assess the patient's fluid status and look at the fluid balance charts
- Inspect the patient's drug chart for medications to increase/reduce stoma output, and electrolyte supplements (in cases of high output stomas)
- Thank the patient and offer help to get dressed.

Complications of a stoma:

- Stenosis of the stoma, risk of obstruction (early)
- Prolapse or retraction of the stoma (early/late)
- Infection (early/late)
- Parastomal herniation (late)
- Bleeding (early)
- Emotional problems coming to terms with a stoma (early/late)
- Skin reaction (early/late)
- Ileostomy:
 - Dehydration from high output
 - Electrolyte abnormalities

Indications for stomas:

- End colostomy (single lumen, flush with skin, firm brown contents)
 - Resection of part of colon, e.g.: due to carcinoma, diverticulitis, perforation
 - E.g.: Hartmann's procedure - in emergency cases where primary anastomosis cannot be obtained - this can be reversed at a later date
 - E.g. Abdominoperineal resection for sigmoid carcinoma
- Loop colostomy (two lumens, flush with skin, firm brown contents)
 - To allow the bowel to rest
 - Diverticulitis
 - Or rectal carcinoma which cannot be resected (so colostomy formed to prevent obstruction)
 - Or to defunction a healing anastomosis (e.g. following an anterior resection of the sigmoid and creation of a primary colo-rectal anastomosis)
 - This has largely been replaced by loop ileostomy (because it is easier to site, less bulky, and easier to surgically close)
- End ileostomy (single lumen, spouted, liquid green/yellow contents)
 - Total colectomy
 - E.g.: due to Ulcerative Colitis or Familial Adenomatous Polyposis

- Loop ileostomy (two lumens, spouted, liquid green/yellow contents)
 - Usually formed to allow the bowel to rest
 - Acute severe Diverticulitis
 - Rectal carcinoma which cannot be resected (to prevent obstruction)
 - Defunctioning of rectal/anal disease in a flare up of Crohn's disease
- Double barreled colostomy (two lumens not joined by tissue, flush with skin, firm brown contents)
 - Resection of bowel e.g.: due to carcinoma
 - Usually resection of caecum
- Urostomy
 - This is a general term for the surgical diversion of the urinary tract. The main reasons for a urostomy are cancer of the bladder, neuropathic bladder, and resistant urinary incontinence
 - The bladder is usually removed, but this may depend on the underlying condition. Formation of an ileal conduit is the most common procedure, which constitutes isolation of a segment of ileum. One end of the ileum is closed and the two ureters are anastomosed to it. Finally, the open end of ileum is brought out onto the skin as an everted spout and will look similar to an end ileostomy. Urine drains almost constantly from the kidneys through the ureters and ileal conduit into a stoma bag