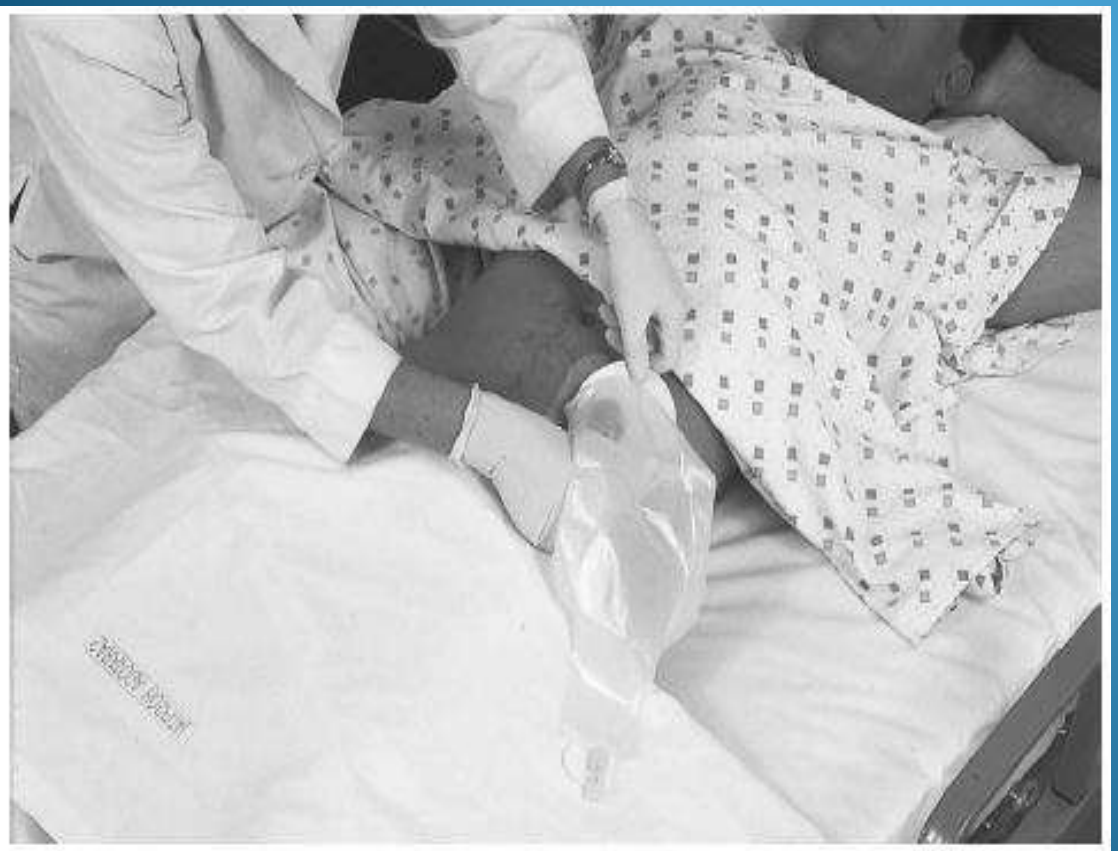
COLOSTOMY CARE



INTRODUCTION

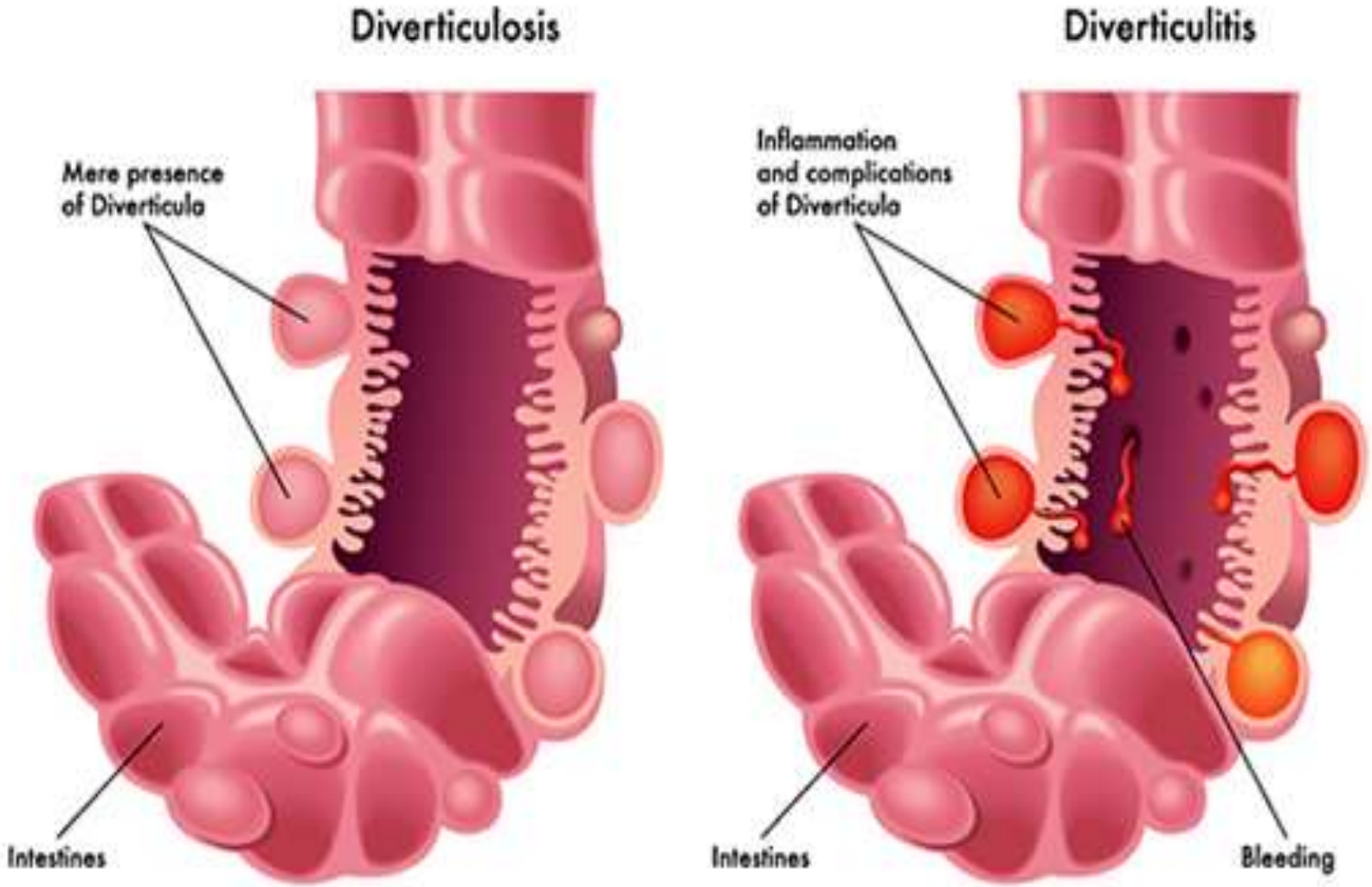
A colostomy is a surgical procedure that brings one end of the large intestine out through the abdominal wall. During this procedure, one end of the colon is diverted through an incision in the abdominal wall to create a stoma. A stoma is the opening in the skin where a pouch for collecting feces is attached. People with temporary or long-term colostomies have pouches attached to their sides where feces collect and can be easily disposed of.

DEFINITION

Colostomy is an operation in which an artificial opening is made into the colon on the anterior abdominal wall to permit the escape of faeces and flatus.

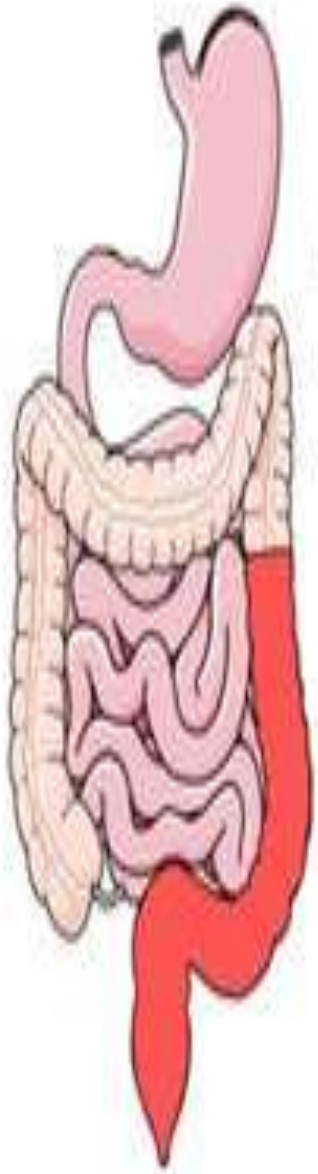
Indications of colostomy surgeries

- Birth defect, such as a blocked or missing anal opening, called an imperforate anus
- Serious infection, such as diverticulitis, inflammation of little sacs on the colon
- Inflammatory bowel disease
- Injury to the colon or rectum


Diverticulosis
Mere presence of Diverticula
Intestines
Diverticulitis
Inflammation and complications of Diverticula
Intestines
Bleeding

Crohn's Disease

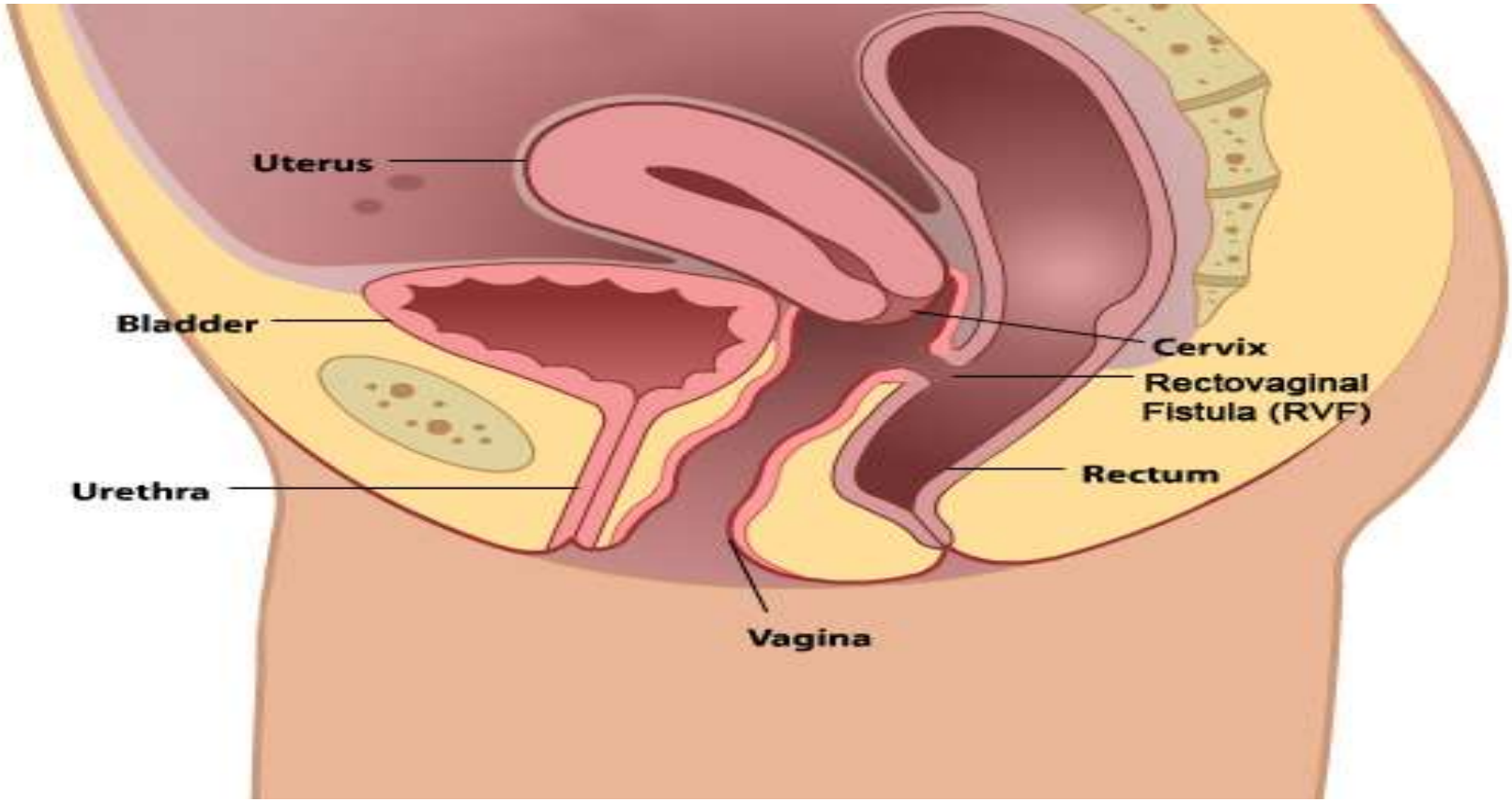
- May affect any part of the GIT
- Discontinuous patchy inflammation
- Transmural (affects the full thickness of the bowel wall)



Ulcerative colitis

- Affects only large intestine
- Continuous inflammation
- Mucosal and submucosal layers are affected

- Partial or complete intestinal or bowel blockage
- Rectal or colon cancer
- Wounds or fistulas in the perineum. A fistula is an abnormal connection between internal parts of the body, or between an internal organ and the skin. A woman's perineum is the area between her anus and vulva; a man's lies between his anus and scrotum.



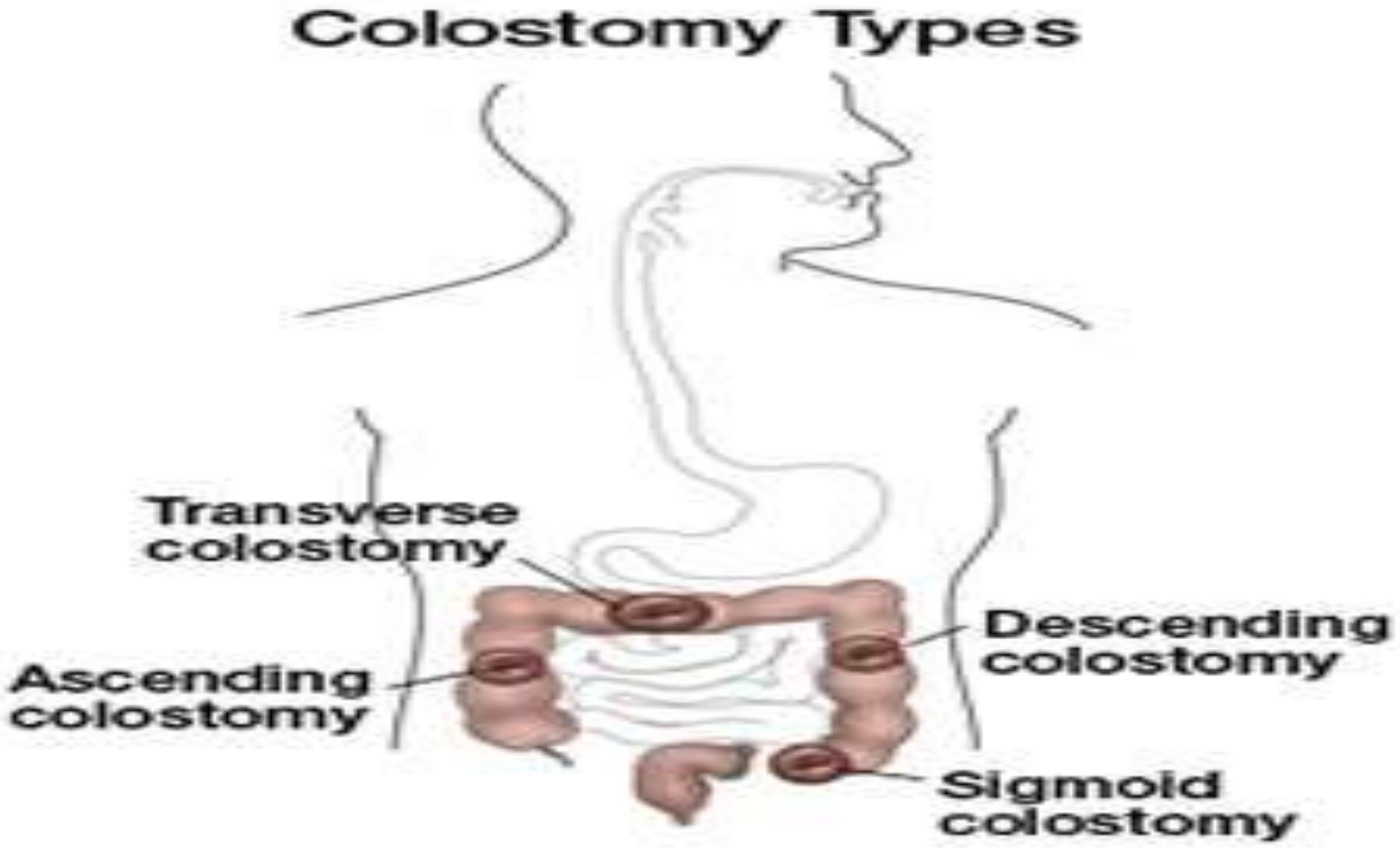
A **rectovaginal fistula** is an abnormal connection between the lower portion of your large intestine — your rectum — and your vagina. Bowel contents can leak through the **fistula**, allowing gas or stool to pass through your vagina

Types of colostomy

Types of colostomy on the basis of duration

- **Temporary-** some infections or injuries require giving the bowel a temporary rest, then reattaching it.
- **Permanent colostomy-** It may be required for a more serious or incurable problem, such as cancer that requires removal of the rectum, or a failure of the muscles that control elimination.

TYPES OF COLOSTOMIES ACCORDING TO THE LOCATION



- **Ascending colostomy** — is made from the ascending part of the colon. The ascending colostomy is usually located in the low to middle right side of the abdomen. The output is often liquid to semi liquid, and gas is common.
- **Transverse colostomy** — is made from the transverse part of the colon. The transverse colostomy is usually located in the center of the abdomen above the navel. The output often is liquid to pasty, and gas is common.

- **Descending colostomy** — is made from the descending part of the colon. The descending colostomy is typically located on the lower left-hand side of the abdomen. The output may be pasty to a formed consistency, and gas is common.
- **Sigmoid colostomy** — is made from the sigmoid colon. The sigmoid colostomy is usually located in the lower left-hand side of the abdomen. The output is usually pasty to a formed consistency, and gas is common.

Types of colostomy on the basis of stoma

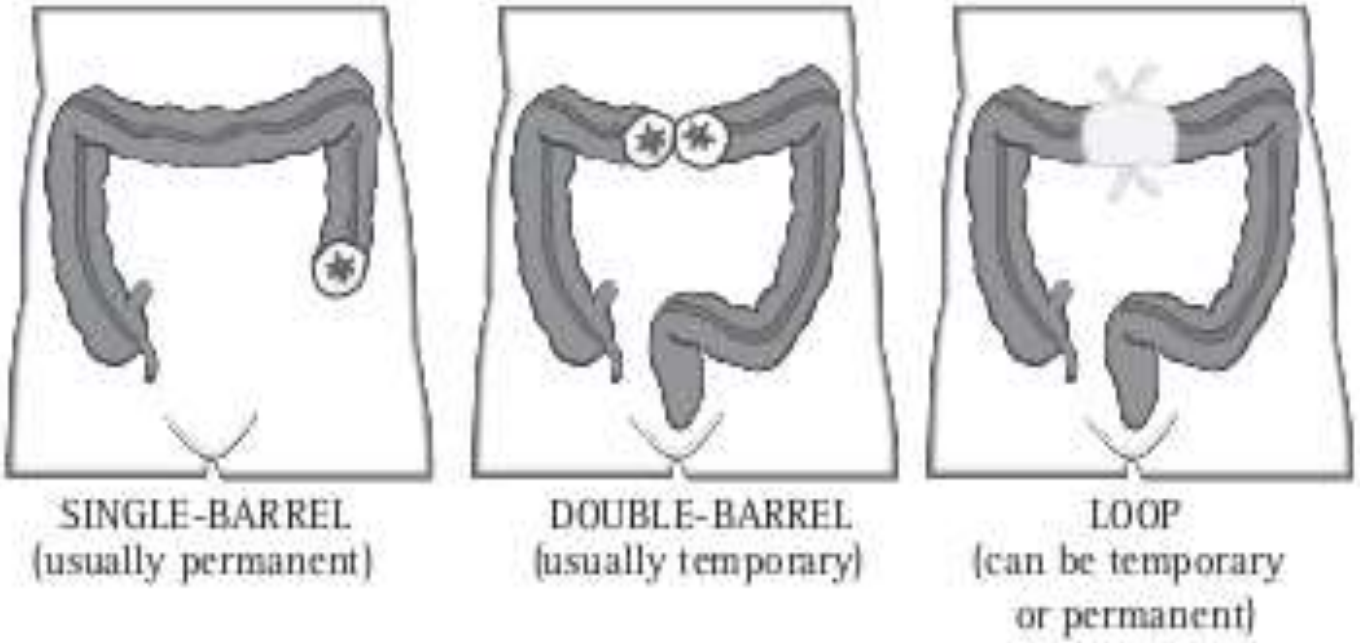


Figure 4. Types of Colostomies

- **Single barrel colostomy:** A stoma is created from one end of the bowel. The other portion of the bowel is either removed or sewn shut

- **Double-barrel colostomy** -double barrel transverse colostomy rarely is performed today. In this surgery, the bowel is completely divided resulting in two stomas on the abdominal wall.

  Both ends of the bowel are brought through the abdomen to the skin surface as two separate sections. The proximal stoma is functional and expels feces while the distal stoma passes mucus.

- **Loop colostomy:** This type of colostomy is usually used in emergencies and is a temporary and large **stoma**. A loop of the bowel is pulled out onto the abdomen and held in place with an external device. The bowel is then sutured to the abdomen and two openings are created in the one stoma: one for stool and the other for mucus.

Characteristics of ideal stoma

- Moist, round, beefy red, budded shape
- Appearance similar to a rose bud
- Protrusion 2-3cm (20-30mm)
- Located on smooth portion of abdomen, away from beltlines, bony prominences, suture lines, and umbilicus
- Lumen in center of stoma
- Adequate surface area- two to three inches of flat surface surrounding stoma
- Location- easily seen by patient- for many people, the best location is in the lower quadrant.

Procedure for colostomy care

PURPOSES

- To prevent leakage
- To prevent excoriation of skin and stoma
- To observe stoma and surrounding skin
- To teach patient and relatives about care of colostomy and collecting bag.

Articles

- A tray containing
- Water in basin
- Soap in dish
- Disposable colostomy bag with clamp
- Stoma measuring guide
- Towel
- Mackintosh
- Clean gloves
- Zinc oxide ointment
- Skin barrier
- Bed pan with cover

Procedure	Rationale/scientific principles
• Identify the patient and check doctor's order.	• To carry out right procedure for right patient
• Explain procedure to the patient and explain to him how he has to cooperate	• To gain cooperation from the patient

• Assemble the necessary equipments	• For easy access
• Wash hands and wear gloves	• To prevent infections
• Spread mackintosh and draw sheet	• To protect linen from soiling

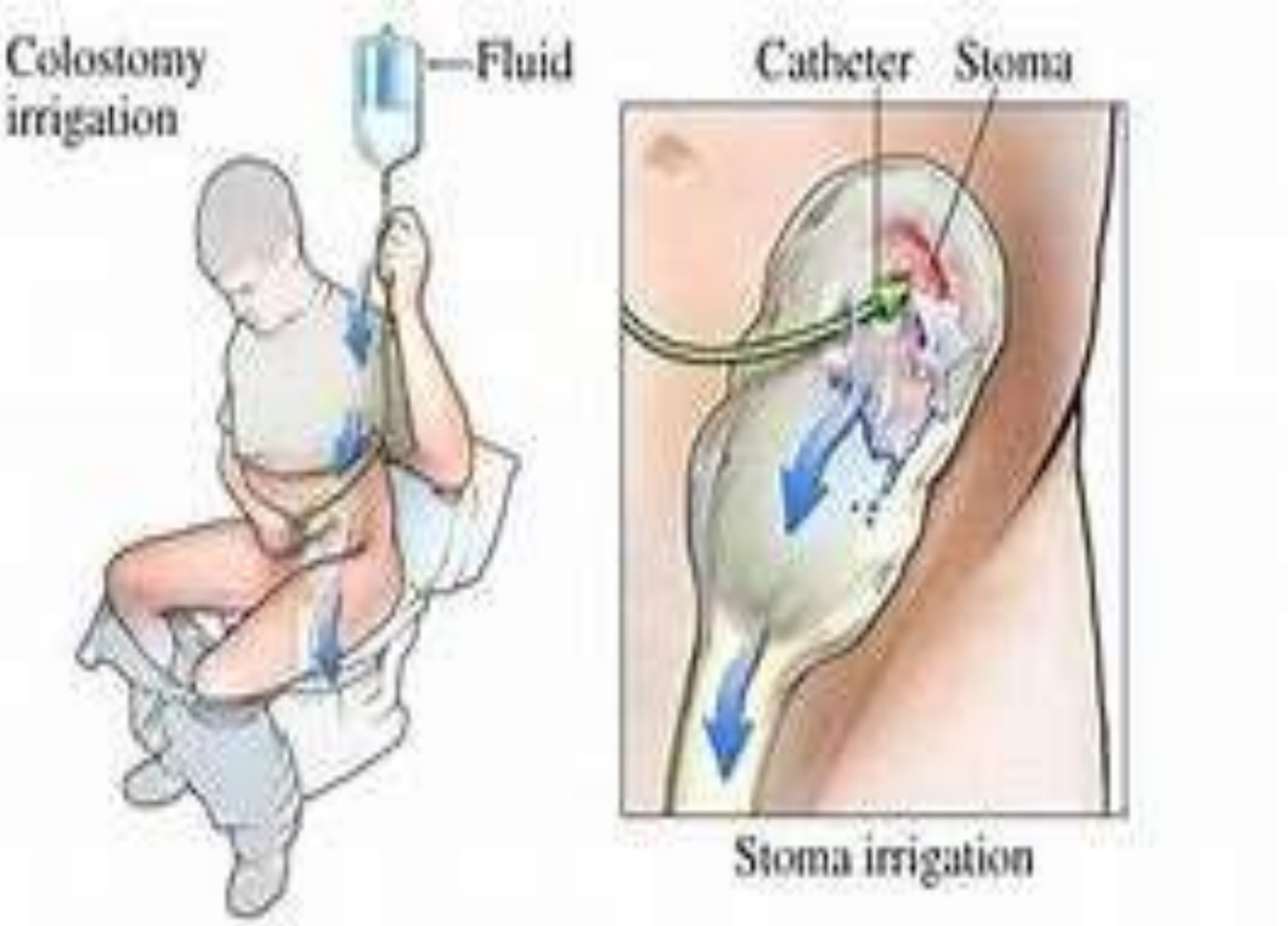
• **Remove used pouch and skin barrier gently by pushing the skin away from the barrier**	• **Reduces trauma, jerking irritates skin and can cause tear**
• Remove clamp and empty the contents into the bed pan, rinse the pouch with tepid water or normal saline	• To minimize the bed odour and growth of microbes
• Discard the disposable pouch in paper bag	• For proper waste management.

• **Observe stoma for colour, swelling, trauma and healing. Stoma should be moist and pink.**	• To **find out complications**
• Cover the stoma with a gauze piece	• To prevent the fecal matters from contacting with skin. Stoma surface is highly vascular. Skinbarrier does not adhere to wet skin.
• Clean peristomal region gently with warm tap water using gauze pad. Do not scrub the skin, dry completely by patting the skin with gauze.	

• **Measure the stoma using measuring guide.**	• **Ensures accuracy in determining correct pouch size needed.**
• Trace same circle behind the skin barrier, using scissors, cut an opening 1/6th to 1/8th inch larger stoma before removing the wrapper over adhesive part. Put skin barrier and pouch over the stoma and gently press on to the skin, for 1-2 minutes. Use the pouch if it drainable using a clamp or clip.	• To prevent irritation to skin.

• **Clean and replace all articles**	• **To maintain inventory**
• Wash hands	• To prevent cross infection
• Record the procedure with following details (with date and time). Amount, color, and consistency of the fecal matter in the pouch.	• For further reference

Colostomy irrigation procedure




Irrigation solution
Irrigation cone inserted into stoma

Irrigating sleeve


Irrigation bag
Clamp
Tubing
Sleeve


Top of
sleeve
Cone

Articles

- Lubricant
- Irrigation solution
- Irrigation set (1000-2000 ml container, tubing with irrigating stoma cone,clamp)
- Irrigating sleeve with adhesive or belt
- Toilet tissue to clean around stoma
- Disposable sack for soiled dressing

Procedure	Rationale/ scientific principles
• Identify the patient and check doctor's order	• To do right procedure for right patient
• Explain the procedure to the patient	• To provide comfortable position

• Wash hands	• To prevent cross infection
• Place 500-1000ml of luke warm water (not exceed 40.5 degree celcious) in container. Hang container on hook or IV pole (18-24 inches) above stoma (about shoulder height).	• Rate of flow and forces of the fluid depend upon the height of the reservoir
• Expel the air from the tubing and clamp. It removes the froth if any	• Air introduced into the colon causes discomfort to the patient.

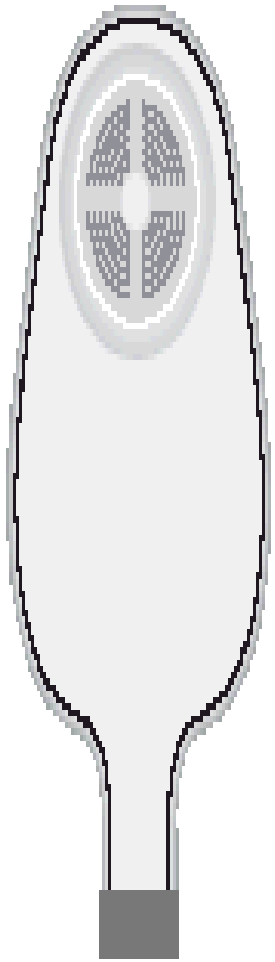
• **Untie the colostomy bag and remove the dressing and discard them into the kidney tray**	• **This helps to control odour and splashing**
• Apply irrigating sleeve and place bottom end in toilet bowl	• Allow feces and water to flow directly into the commode.
• Lubricate stoma cone, insert cone tip gently into the stoma and hold tip securely in place. Allow irrigation solution to flow in steadily for 5-10 minutes.	• Lubrication prevents the friction. • Rapid flow of solution can cause abdominal cramps

• **If cramping occurs stop flow of solutions for a few seconds for a few seconds, leaving the cone in place.**	• **Clamping prevents introduction of air into colon. Ambulation stimulates peristalsis.**
• Clamp the tubing and remove irrigating cone when the desired amount of irritant has been delivered or patient senses colonic distension. Allow 30-40 minutes for the solution and feces to be expelled. Initial evacuation is usually completion 10 - 15 minutes. Close of the irrigating sleeve at the bottom to allow ambulation.	
• Clean , rinse , and dry peristomal skin	• To prevent skin irritation.

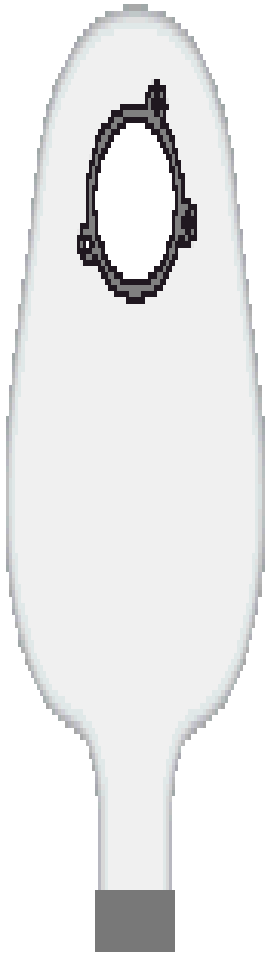
Types of pouching systems

There are 2 main types of systems available:

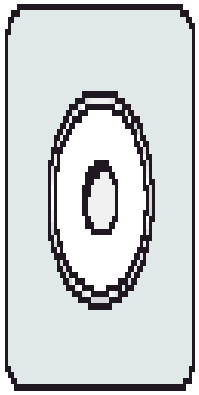
- One-piece pouches have both a pouch and skin barrier attached together in the same unit. When the pouch is removed, the barrier also comes off.
- Two-piece systems are made up of a skin barrier separate from a pouch. When the pouch is taken off, the barrier stays in place.



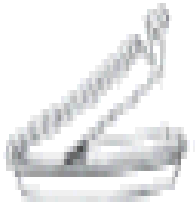
One-piece drainable pouch w/skin barrier



Two-piece drainable pouch



Flange for two-piece system



Drainable pouch clip

- One-piece pouches system

Ostomy Pouch are as follows:

- They have a lower profile which means they are less visible under clothes. This can be helpful when you are wearing a more fitted style of clothing.
- The bag and wafer/flange can not be separated so this can feel more secure, since there is zero chance of the bag and flange coming apart.
- One-Piece systems are generally less expensive than Two-Piece Ostomy systems.

Piece Ostomy Bags are:

- Changing the wafer or flange at every bag change can make our skin tender and cause some irritation.
- Anytime someone may change the bag, then we have to get everything positioned around our stoma right, which can take time, and be cumbersome in a public restroom.
- We may go through skin barrier pastes, tapes, and adhesive removers more often.

- Two-piece systems

Ostomy System are as follows

- Flanges or Wafers can remain in place for two to four days, which is gentler on the skin.
- You can change the size of the bag you are using; smaller bags can be great for intimacy or swimming. You could then change to a regular size bag when your activity was completed.
- Bag changes are fast, the old bag can be removed and a new one attached quickly and easily. This is perfect for running errands, parties, or anytime you are away from home.

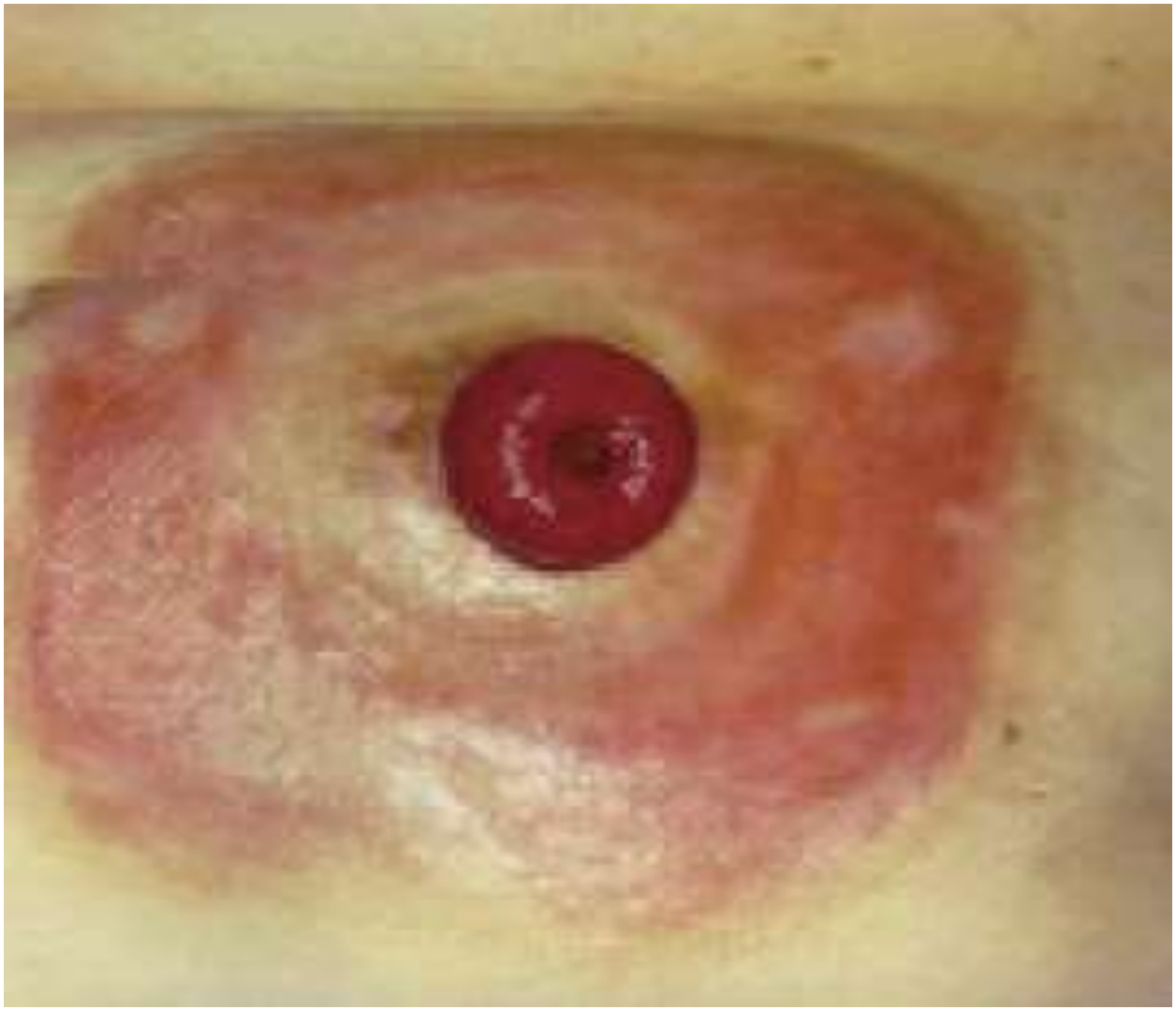
Piece Ostomy System:

- Can be more bulky than a One-Piece making it more visible under clothing.
- Bag and flange (wafer) can come apart and cause leaks.
- If the stoma output gets behind the flange, it can be harder to see since you are changing the flange less often.
- Generally the Two-Piece System is more expensive.

- Some pouching systems can be opened at the bottom for easy emptying. Others are closed and are taken off when they are full. Still others allow the adhesive skin barrier to stay on the body while the pouch may be taken off, washed out, and reused. Pouches are made from odor-resistant materials and vary in cost. They can be either clear or opaque and come in different lengths

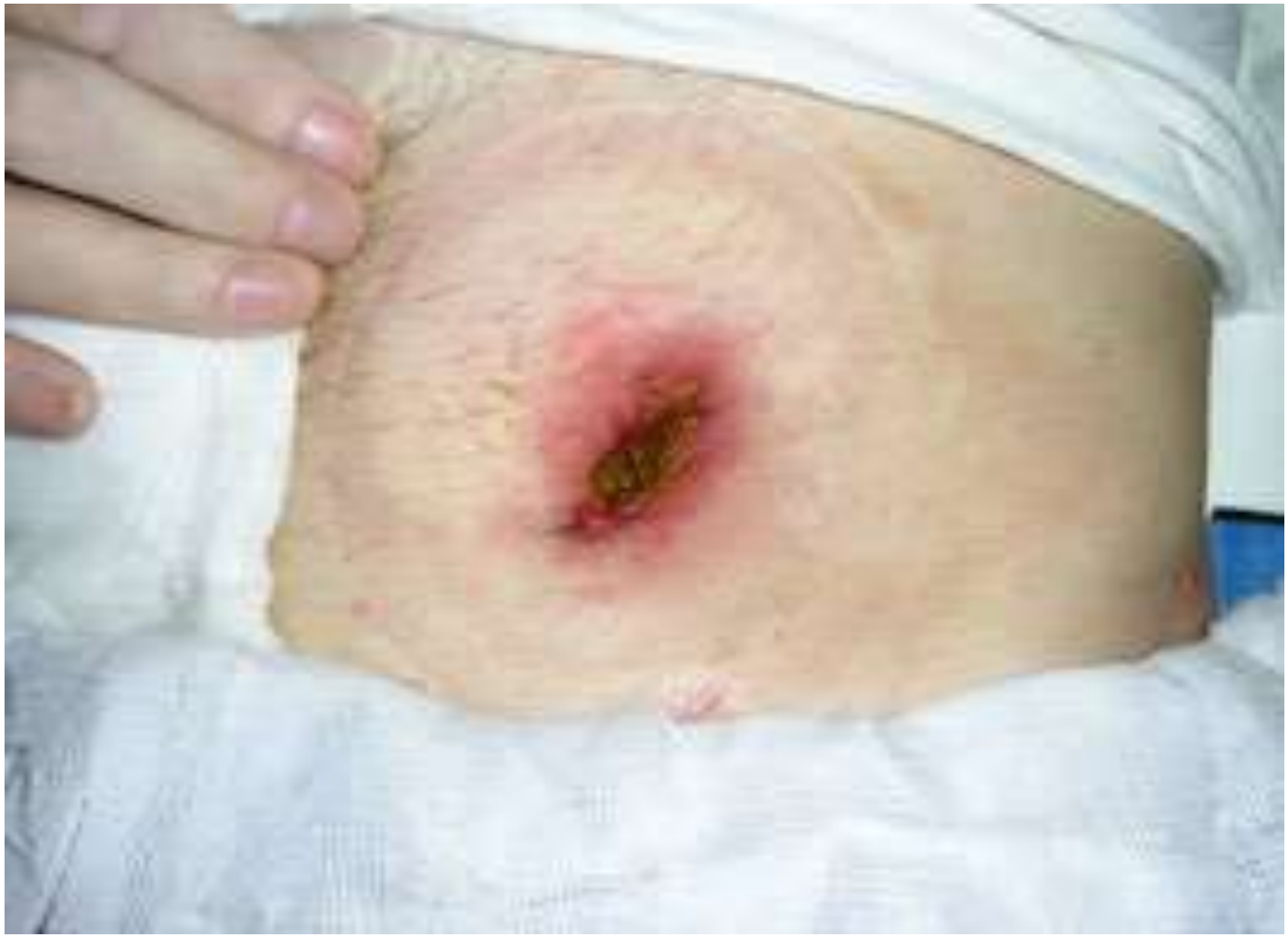
Complications

- **Skin irritation.** This is a common problem that's caused by the adhesive on ostomy appliance. Try using a different appliance or changing the adhesive you use.
- **Dehydration.** Having a lot of waste exit through stoma can lead to dehydration. In most cases, someone can rehydrate them self by drinking more fluids, but in severe cases might require hospitalization. Avoiding foods high in sugar, salt, and fat can decrease anyone's risk of dehydration.
- **Leakage.** If stoma appliance doesn't fit properly, it can leak. If this happens, then probably need a new appliance that fits better.



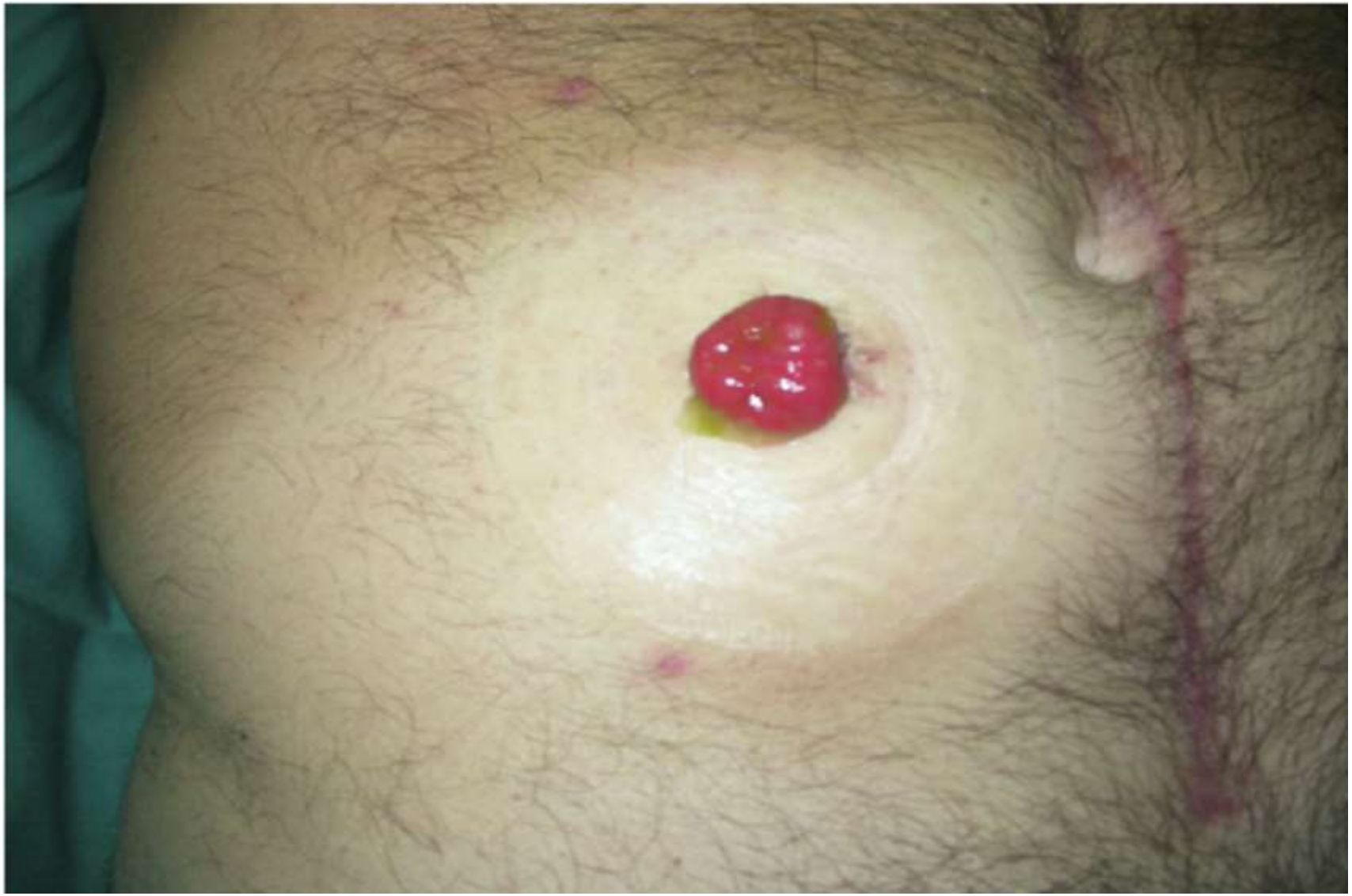
Skin irritation

- **Bowel obstruction.** If food isn't chewed or properly digested, it can cause a blockage in someone's intestines. Symptoms of a blockage include cramps, stomach pain, and a sudden decrease in waste. Inform doctor if someone notices any symptoms of a blockage. While it may clear up on its own, some blockages require additional treatment.
- **Retraction** It's possible for stoma to move inward, usually due to weight gain, scar tissue, or improper placement. Retraction makes it hard to attach appliance and can also cause irritation and leakage. Accessory products of appliance can help, but a new stoma might be needed in severe cases.

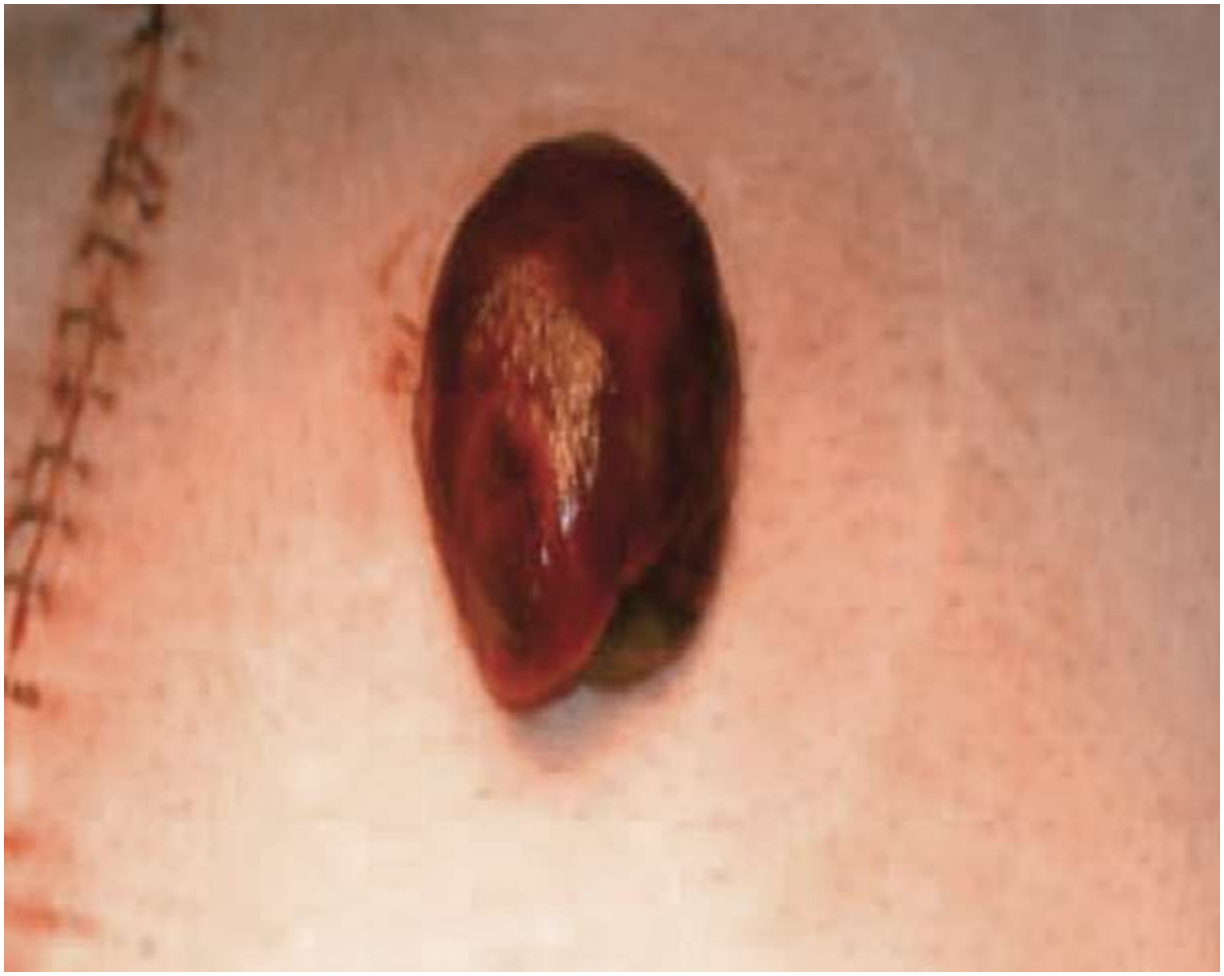


- **Retracted stoma**

- **Parastomal hernia.** This is a frequent complication that happens when intestine starts to press outward through the opening. These are very common and often go away on their own. However, in some cases may need surgery to repair it.
- **Necrosis.** Necrosis refers to tissue death, which happens when blood flow to stoma is reduced or cut off. When this happens, it's usually within the first few days after surgery.



- **Parastomal hernia**



- Stomal necrosis

Most complications associated with stomas are minor, but some, especially necrosis and dehydration can turn into medical emergencies.

Inform the doctor immediately if:

- Someone is vomiting and not seeing any waste in your pouch
- the skin around stoma is turning blue, purple, or very dark red
- and someone is becoming dizzy, lightheaded, and always thirsty

- NURSING CARE

Preoperative Nursing Care

- Educate about what to expect (many patients are scared), how the stoma will look (show them a picture), and where it will be on the abdomen.
- Start teaching them about the pouching system
- MD may prescribe oral antibiotics to reduce bacteria in the colon (which normally lives there) to prevent post-opt infection.
- 2 to 3 days before surgery soft or semi-liquid diet may be ordered
- A cleansing solution and laxative may be ordered to clean the colon and that the patient follows a clear liquid diet prior to surgery (24 hours). Patient may have to be hospitalized due to the profuse diarrhea they will be experiencing and may need an IV solution to maintain hydration.
- NPO day of surgery

Postoperative Nursing Care:

- Monitor the electrolytes, sign of dehydration (urinary output) site and stoma:
- After surgery, stoma will be swollen and large, but after a couple months it will shrink to normal size

Patient teaching

- Prior to discharge, provide written, verbal, and psychomotor instruction on colostomy care, pouch management, skin care, and irrigation for the client. Whether the colostomy is temporary or permanent, the client will be responsible for its management. Good understanding of procedures and care enhances the ability to provide self-care, as well as self-esteem and control.

- Allow ample time for the client (and family, if necessary) to practice changing the pouch, either on the client or a model. Practice of psychomotor skills improves learning and confidence.
- The diet for a client with a colostomy is individualized and may require no alteration from that consumed preoperatively. Dietary teaching should, however, include information on foods to be consumed..