COLOSTOMY IRRIGATION (CI), similar to an enema, is the instillation of fluid into the colon to cause evacuation of stool. CI is a safe option for bowel management for patients with a descending or sigmoid colostomy without relative contraindications. Patients who use CI report an improved quality of life, with less impact on intimacy, spirituality, work, and travel.1,2

For many years, before the advent of today’s odor-proof pouching systems, people with permanent sigmoid and descending colostomies were taught CI as a management option. Yet the use of CI as a management option for these colostomies has fallen by the wayside. This article explains why CI fell into disuse, who can benefit from it, and what to teach appropriate patients.
Looking into the past
In the 1920s, CI was developed as a way to maintain a level of continence for the person living with a sigmoid or descending colostomy. A standard management technique until the 1980s, it involved inserting a catheter through the colostomy stoma and allowing fluid, usually tap water, to flow into the colon, causing stool evacuation. In 1967, Meeker et al. reported four cases of bowel perforation due to using a catheter for CI. This led to the development of the irrigation cone, which is still used to perform CI today. But for various reasons, many patients who are candidates for CI aren’t instructed in this technique.

Cobb et al. surveyed a group of wound, ostomy, and continence (WOC) nurses to determine their level of knowledge about CI. As part of the study, they found many reasons WOC nurses have discontinued teaching CI, including the following beliefs, many of which aren’t supported by the evidence:
- CI isn’t a medically indicated procedure.
- CI isn’t an evidence-based practice.
- CI presents risks to the patient.
- Patients are discharged from the hospital before CI can be taught.
- Instruction isn’t available in the home.
- Changes in equipment mean that pouching is easier than CI.
- Patients decline to perform CI.
- Performing CI adds to the expense.

Advantages of CI
Contrary to many of these assumptions, CI has many potential benefits. For example, those living with a colostomy have reported CI may alleviate the need to wear an external pouching system. CI also improves the person’s sense of well-being and may help resolve issues such as anxiety, depression, and uncertainty. CI reportedly has a positive impact on social challenges, such as maintaining and forming intimate relationships. It also has a positive impact on spiritual and occupational challenges. CI decreases odor and flatus, and facilitates sleeping, eating, and traveling. Those who perform CI have an improved quality of life related to their health compared with those who manage their colostomy by spontaneous evacuation.

Contraindications
At this time, best evidence indicates patients with a descending or sigmoid colostomy should be given the option to learn CI, with some exceptions; for example:
- current chemotherapy treatment
- irritable bowel syndrome
- postradiation damage to the bowel
- Crohn’s disease
- diverticulitis
- peristomal hernia.

Other factors that may limit a patient’s ability to perform CI include poor vision, poor manual dexterity, and altered mental alertness. Because stool must be formed for CI to be successful, CI should be interrupted for episodes of diarrhea related to gastrointestinal upset, radiation, or chemotherapy.

Patient teaching
The option of CI should be offered once patients have recovered from the postoperative period and have returned to their previous bowel pattern. CI may be taught in the home or in an ostomy clinic.

Tell patients that tepid tap water is instilled using a cone system every 24 to 48 hours to evacuate stool from the colon. (See Equipment needed for CI.) Over time, many fluids have been studied to determine if any is better than tap water for CI; for example, polyethylene glycol, glyceryl trinitrate, prostaglandin F2 alpha, bisacodyl, and prostaglandin E2. None was found to work better than tap water, which is cost effective and readily available.

Equipment needed for CI
Sleeve (left) is placed over the stoma; irrigator with cone (right) is used to instill irrigation solution.
Some patients may choose to perform CI every 72 hours, but this timing increases the risk of spilling stool between irrigations. The most common complaint about CI is the time it takes to complete the procedure. It can take 30 to 90 minutes for the return of stool and irrigation solution.

When instructing a patient in CI, nurses should follow a stepwise approach to the procedure, starting with gathering the needed equipment and supplies: a cone irrigator and irrigation bag, irrigation sleeve (either an adhesive one-piece style or one that snaps onto the ostomy wafer flange), lukewarm tap water (approximately 37° C or 98.6° F), water-soluble lubricant if desired, and a new pouching system. If no lubricant is available, tap water or mucus from the stoma can be used.

The patient fills the irrigation bag with the desired fluid volume (usually 500 to 750 mL of lukewarm tap water), attaches the irrigation cone to the end of the irrigation tubing, and primes the tubing. Then the patient attaches the irrigation sleeve to the wafer or to the patient’s body. (See Patient wearing CI sleeve.) Tell the patient to place the irrigation bag at shoulder level to allow for free flow of fluid into the stoma and then sit on the toilet or next to it.

Next, the patient lubricates the stoma cone, gently places it into the stoma, and opens the clamp on the tubing to let the irrigant flow from the bag. (See Inserting CI cone into stoma.) If no flow occurs, the patient should gently reposition the cone.

If cramping occurs during instillation, the patient should stop the flow until the cramping has passed, then resume the instillation.

Once the entire volume is infused, the cone should be held in place until cramping begins again, or for at least 5 minutes. This lets the colon distend and stimulates peristalsis. The cone is then removed and the patient waits for initial return of the irrigation fluid and stool.

Because a secondary return of fluid and stool occurs, many patients clamp the pouch and walk around or drink a hot beverage, which stimulates peristalsis. Other patients remain on the toilet. This secondary return of fluid and stool may take 30 to 90 minutes to complete.

Once stool stops coming from the stoma, the pouching system is replaced or the stoma is covered. The irrigation set is cleaned with warm soapy water for reuse. Current Medicare guidelines allow one irrigation set every 3 months, four irrigation sleeves per month, and 4 oz (about 120 mL) of lubricant per month.
Patients may choose to stop performing CI at any time without untoward affects. However, they may need to consult with their healthcare provider or WOC nurse if they’re constipated. A stool softener and stimulant laxative may be needed. According to Grant et al., none of those who chose to stop CI reported any problems converting to natural evacuation.

**Keeping options open**

By teaching appropriate patients about CI, nurses can give them another method of managing their colostomy and perhaps improve their quality of life.

**REFERENCES**


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