

An Evidence-Based Update on Colostomy Irrigation

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INTRODUCTION

This Evidence-Based Report Card (EBRC) reviews the effect of colostomy irrigation on frequency of bowel evacuation, flatus production, odor, and health-related quality of life.

Colostomy irrigation (CI) - instilling fluid into the colon via the stoma to stimulate peristalsis and promote bowel elimination. When performed routinely, CI may result in little or no stool passage between irrigations, thus allowing the individual to achieve a level of continence.

Relative contraindications for CI:

- Irritable bowel syndrome, peristomal hernia, prostration damage to the bowel, diverticulitis, and Crohn's disease.

Best CI candidates:

- Colostomy in descending or sigmoid colon
 - Left side of colon can store stool for approximately 24 to 48 hours.¹
- Factors to assess when evaluating a patient for routine CI:
 - Vision, manual dexterity, and mental alertness.

Issues associated with presence of an ostomy:

- Ongoing stoma pouching, peristomal skin problems, odor control, and leakage.^{2,3}
- May impair health-related quality-of-life (HRQOL) factors related to social function such as sleep, sexual activities, working, and going out.
- Psychosocial conditions linked to the presence of a colostomy include depression and anxiety.



QUESTION

Does regular CI improve colostomy function (frequency of bowel evacuation, flatus production, odor) and HRQOL in adults aged 18 years or older with a permanent left-sided colostomy compared to spontaneous evacuation and containment using a pouching system?

METHODS

Literature systematically searched

- Key terms "colostomy," "colostomies," "therapeutic interventions," "irrigation," and "irrigator."
- By a professional librarian using CINAHL and PubMed electronic databases (Table 2).
- Inclusion criteria any patient with left-sided colostomy living with a colostomy.
- Randomized controlled trials and nonrandomized comparison studies included.
- Descriptive studies, individual case studies, case series, and cross-sectional studies were excluded, as were studies published in languages other than English.
- No studies were excluded based on publication date.
- Refer to the article by Gray and colleagues⁴ for a detailed description of methods used to generate Evidence-Based Report Card and taxonomies for Levels of Evidence and Strength of Recommendations for Treatment (SORT) statements.

Search ID#	Search Terms
51	(MH "Colostomy")
52	TI colostomy OR AB colostomy
53	TI colostomy OR AB colostomies
54	51 OR 52 OR 53
55	(MH "Therapeutic Irrigation")
56	TI irrigation OR AB irrigation
57	TI irrigator* OR AB irrigator*
58	55 OR 56 OR 57
59	54 AND 58

Initial search returned 499 articles

- Narrowed to 477 citations after removal of duplications.
- Abstract review narrowed search to 71 articles.
- Full text review of articles,
 - 46 studies excluded because were not in English, focused on procedural education or the effects of various surgical approaches, or they were not pertinent to this topic.
- Identified 4 studies that comprise this EBRC (Figure 1).



RESULTS

Colostomy irrigation reduces the frequency of bowel evacuation as compared to spontaneous evacuation with containment in a pouching system (Level of Evidence: A).

Reduction in the frequency of bowel evacuation from the colostomy led to reductions in pouch usage (Level of Evidence: B).

Colostomy irrigation led to absence of stool passage between irrigations in some patients (Level of Evidence: B).

Colostomy irrigation decreased odor and flatus as compared to management using spontaneous evacuation (Level of Evidence B).

Colostomy irrigation was associated with higher HRQOL as compared to spontaneous evacuation based on cumulative DDO-15 scores in 1 study; no differences when individual domain scores were compared using the SF-36 instrument (Level of Evidence B).

SORT Statement

WOC nurses should educate patients with a left-sided permanent colostomy about the potential benefits and techniques of CI (SORT statement Level 2).

COLOSTOMY IRRIGATION PROCEDURE

- Assemble supplies
 - Cover irrigator and irrigation bag
 - Irrigation sleeve (can be 1 place only or may snap on to the flange)
 - Warm water
 - Water soluble lubricant if desired
 - New pouching system
 - Connect irrigation cone to irrigation bag
 - Fill bag with desired amount of irrigating solution (500-750 ml tepid tap water).
 - Prime the tubing.
 - Apply irrigation sleeve
 - Place irrigation bag at shoulder height to enable installation of fluid into colon using gravity.
 - Lubricate stoma cone with water-based lubricant.
 - Gently place cone into the stoma.
 - Open the clamp and allow the irrigating solution to flow using gravity; do not force solution into the bowel. If the irrigating solution does not flow, reposition the cone.
 - Allow the entire amount of fluid to instill. If cramping occurs, stop the flow and wait for cramping to pass and then resume institution.
 - Once entire volume has infused, hold the cone in place until cramping begins again or at least for 5 minutes to distend the colon to stimulate peristalsis.
 - Remove the cone and wait for return of irrigation solution and stool. This may take 30-90 minutes to complete.
 - Once stool stops coming from the stoma, replace the pouching system or cover the stoma as directed.
 - Clean the irrigation set with warm soapy water for use.
- *Current Medline® guidelines allow 1 irrigation set every 3 months, 4 irrigations given per month, and 4 ounces of irrigant per month, along with 31 stoma caps per month.

CONCLUSIONS

Colostomy irrigation is a viable option for management of the left-sided permanent stoma and should be considered.

CI VIDEO

<https://www.youtube.com/watch?v=mzqr6PQ0f8>

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http://journals.lww.com/jwoconline/Fulltext/2015/03/000/Does_Colostomy_Irrigation_Affect_Functional_Outcomes.aspx

