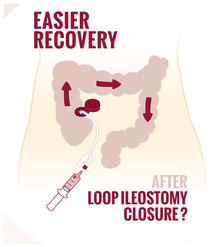
At-Home Self-Administered Bowel Stimulation Before Loop Ileostomy Closure: A Single-Center Single-Arm Feasibility Trial

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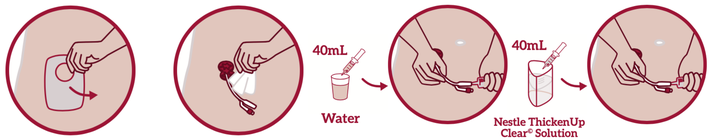
Introduction

- Ileus is the leading complication after loop ileostomy reversal[1], with postoperative ileus (POI) affecting 10-20% of cases [2-4] and significantly impacting 30-day readmission rates[5,6,7]
- Preoperative bowel stimulation has been shown to effectively reduce POI and hospital stay durations [8]



Objective

Assess the feasibility of at-home self-administered bowel stimulation before loop ileostomy closure

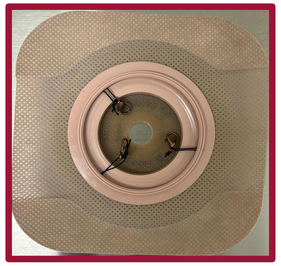


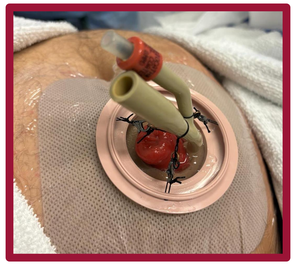
Methods

Participants: 23 adult patients planning elective loop ileostomy closures were included, excluding those with extensive prior surgeries or Crohn's disease

Training: Participants attended an in-person session to learn the bowel stimulation technique using a standardized protocol and were provided with a stimulation kit and an instructional video. Each patient had a foley catheter placed and secured in their ostomy

Home Procedure: 9 at-home stimulations were prescribed, with participants documenting each session in a logbook





- **Feasibility Assessment:** The primary endpoint was feasibility defined as ≥75% of participants successfully performing at least 5 at-home stimulations
- **Secondary Outcomes :** Secondary outcomes included patient-reported difficulties with stimulation, Primary post operative ileus (PPOI), length of stay (LOS), and patient satisfaction
- **Statistical Measures:** Data from logbooks and follow-ups were analyzed using descriptive statistics

Results

Sessions Completed: Participants performed a median of 6.2 at-home stimulations, with 78.3% completing at least 5 sessions

Independence: 59% reported no need for assistance, while others required help for technical aspects of the stimulation

Reported Challenges	Patients (N=23)	Proportion (%)
Difficulty Managing Appliance	9	39.13
Leaks from Ostomy Appliance	5	21.74
Nausea or Vomiting	8	34.78
Discomfort, Pain, or Cramps	5	21.74
Other Reported Issues	6	26.09

Results

Surgical Outcomes:
All underwent successful ileostomy closure; one required an unplanned laparotomy

Postoperative Recovery:
- 73.9% passed flatus by postoperative day 1
- No instances of primary post operative ileus (PPOI)
- Median length of stay was 3 days

Satisfaction:
High satisfaction was reported by 72% of participants, and 100% of participants would recommend the procedure to others

Chart 1: Satisfaction with Home Stimulations

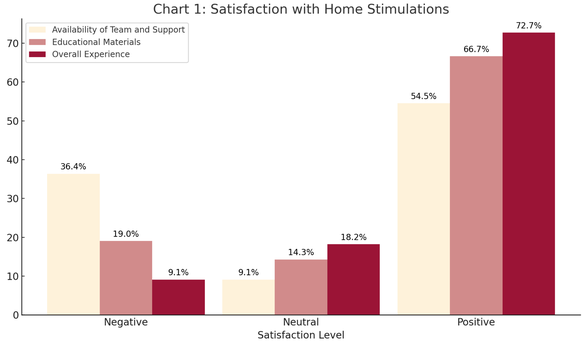
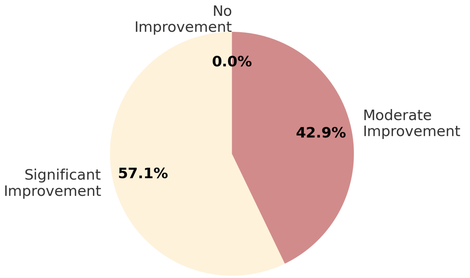


Chart 2: Patient-Reported Impact of Bowel Stimulations on Postoperative Recovery



Conclusions

This trial demonstrated that at-home bowel stimulation prior to loop ileostomy closure is feasible and can be a viable option in future implementation

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