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Effects on Acute Post- Operative Gastrointestinal Complications**

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Bowel Clean Out Prior to Intrathecal Baclofen Pump Implantation: Effects on Acute Post-Operative Gastrointestinal Complications

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Background

Intrathecal baclofen (ITB) pumps have been used for management of spasticity and dystonia since the 1980’s. There is limited data on immediate post-operative complications such as GI adverse events after surgery for ITB pump related procedures.

The aim of this study was to compare patients who underwent a pre-operative bowel cleanout to those who did not and the relationship with post-operative complications such as nausea and vomiting. We additionally evaluated the relationship with constipation requiring an escalation of their bowel regime post-operatively .

Methods

Design/Participants: Retrospective Cohort Study. A chart review of all patients who underwent ITB placement from January 2015-December 2022 was completed at an independent hospital.

Intervention: Pre-operative bowel clean out including

- Polyethylene glycol three times a day for 3 days
- Fleet’s Enema nightly for 3 days

Outcomes

- 1) Quantity of children requiring escalation of bowel program compared to home regimen after ITB implantation
- 2) Rates of nausea and/or emesis after ITB implantation and relationship to pre-operative bowel cleanout

Bowel Escalation

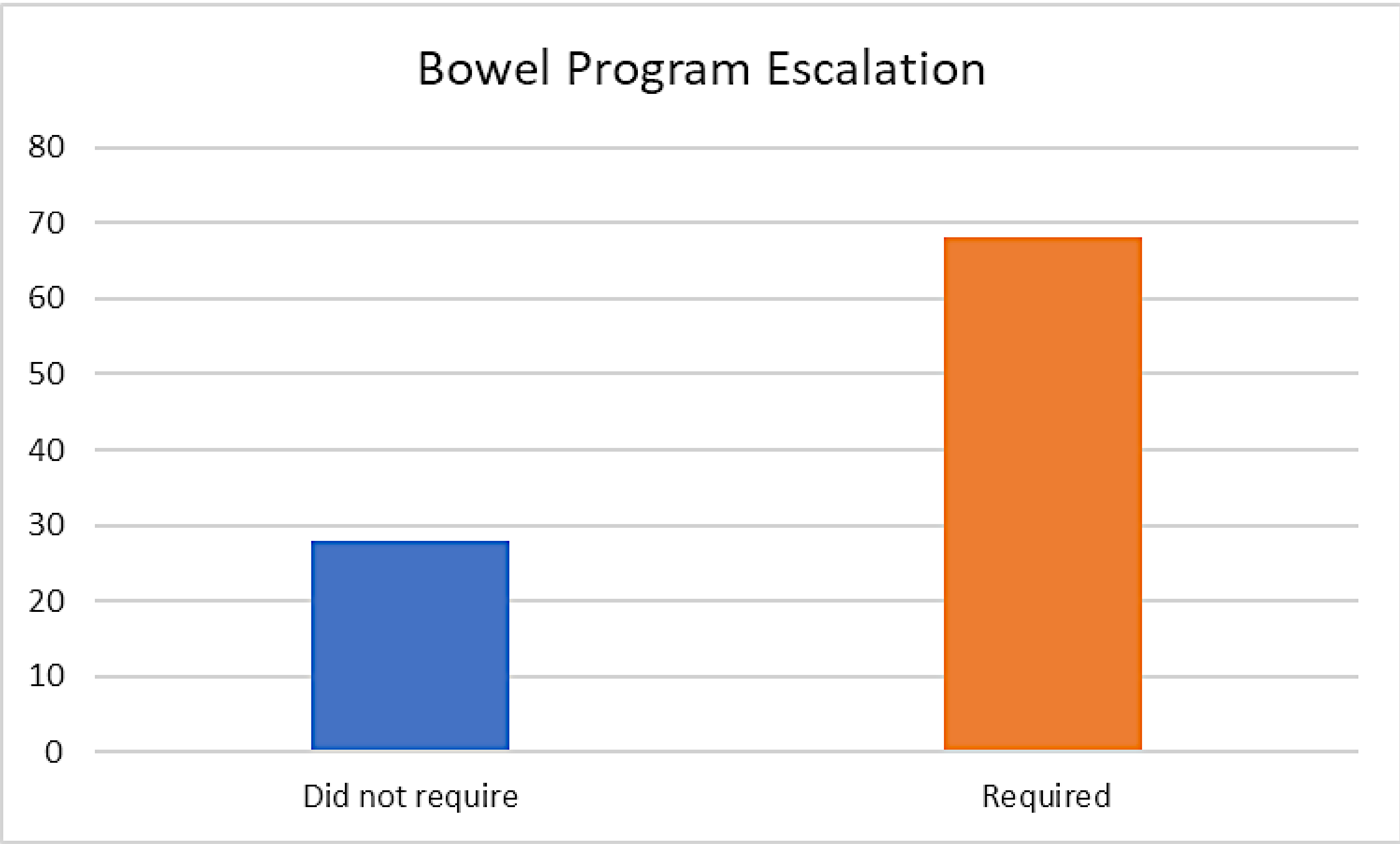


Figure 1 : 69 of 97 patient’s required an escalation from their home bowel regimen compared to 28 of 97 patient’s who did not require escalation from their home regimen.

	Emesis	No Emesis
Cleanout	38	23
No Cleanout	15	21

Table 1: Comparison of those who had emesis in the patient’s who had a bowel cleanout compared to those that did not undergo a bowel cleanout. Overall, there is a significant difference in the patients with emesis who did not undergo a bowel cleanout (p=(0.049).

Results

Of the 97 procedures performed in the study period, including new pump and catheter implantations and catheter revisions, 62% (n= 60) were instructed to complete a bowel clean pre-operatively.

There was a significant difference between patients who had emesis in those who did not undergo a bowel cleanout preoperatively when compared to patients that did undergo a bowel cleanout (p=0.049).

A chi-square test of independence demonstrated there was no significant relationship between performance of a cleanout and the need to increase their bowel regimen post-operatively (chi squared value= 0.0062, p=0.937382).

Discussion

It appears that escalation of a bowel regimen is typically required during a post-ITB implant admission regardless of if a preoperative bowel cleanout is performed. Moreover, it should be carefully considered for each individual patient. As constipation may contribute to emesis, this immediate escalation of the bowel regimen in the post-operative period should also be considered.

References available upon request