Five-Years Bowel Management Experience in Pediatric Colorectal Patients with Fecal Incontinence

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Methodology

- A retrospective cohort chart review of pediatric patients attending bowel management clinic in a tertiary center in Riyadh, Saudi Arabia over five years period (2022- 2025).
- Data collection included demography, Bowel management program (saline enema, medication or combination) ,success, failure and compliance rate.
- Success is defined as clean underwear for 24 hours and objectively measured using Baylor score.
- Patients with colorectal conditions as Anorectal malformation, Hirschsprung disease, and idiopathic constipation) were included.

BMP Protocol

Treatment Type	Medication / Solution	Dosage Range (ml/mg)
Enema	Normal Saline	100–900
Additive	Glycerin Oil	5–80
Laxatives	Senna- based	8.6–77.4
	Bisacodyl	2.5–5
Antimotility Agent	Loperamide	6–8

Results

Baylor score	n (%)	Pre BMP	median	Post BMP	median
Overall	52 (71 %)	10-54	34	2-42	10

Outcome measures	Overall	ARM	HD	IC
Success	67 (87%)	50 (65%)	14 (18%)	3 (4%)
Failure	4 (5%)	1 (1%)	2 (3%)	1 (1%)
Noncompliance	6 (8%)	2 (3%)	2 (3%)	2 (3%)

Characteristic	n (%)
Total number of Patients enrolled (n)	**77**
Age (years)	3–18 (Mean 8)
Gender (M/F)	50 (65%), 27 (35%)
Colorectal condition • Anorectal malformation (ARM)/ Cloaca • Hirschsprung's Disease (HD) • Idiopathic Constipation (IC) - Refractory	 53(69%) / 6(11%) 18(23%) 6(8%)
Protocol Type • Saline Enema [antegrade/ retrograde] • Laxatives • Loperamide alone • Combined (Saline enema + loperamide) • Switchers between programs	 61 (79%) [9 (15%)/ 52 (85%)] 14(18%) 2 (3%) 4 (5%) 24(31%)

Discussion

We followed the published recommendations, and we started by subgrouping patients to those with true fecal incontinence and those with pseudo-incontinence (overflow) and we studied their underlying condition and worked them up radiologically to determine the anatomical integrity of the sacrum and presence of any associated spine anomalies that can affect the continence mechanism and the prognosis

Conclusion

- Our study highlights the importance of individualized approaches in optimizing treatment outcomes for pediatric patients with fecal incontinence.
- Bowel management program has proved successful since its implementation. The underlying condition remains the main determinant of success of any program as well as compliance.
- The key for success is having a structured program with a dedicated team. Long term follow up helps in supporting families and ensure compliance.