

Is bowel retraining imperative for good anatomic and functional outcomes in patients undergoing ventral mesh rectopexy for full-thickness rectal prolapse?

Introduction

- Ventral mesh rectopexy (VMR)** is gaining popularity for the **repair of full-thickness rectal prolapse**. Its abdominal approach and nerve-sparing technique provide a **lower recurrence rate and better functional outcomes**^{1,2}.
- Bowel function retraining (BFR)** has been shown to enhance bowel function and quality of life for postoperative colorectal patients^{3,4}, and perioperative BFR has been shown to improve functional outcomes in rectal prolapse patients.
- Aim: whether perioperative BFR could result in lower recurrence rates in patients undergoing VMR for full-thickness rectal prolapse.**

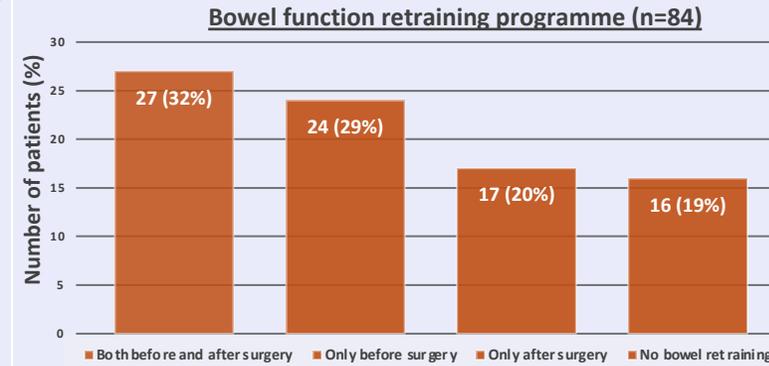
Methods

- Registered as a quality improvement project with the Quality and Assurance Directorate at Guy's and St Thomas' NHS Foundation Trust
- Patients who underwent VMR for full thickness rectal prolapse** were identified via theatre diaries for the period **2012-2022**
- Data was collected via electronic patient records for analysis

Results

Demographics (n=84)		Clinical and Surgical details (n=83)	
Male	8 (9.5%)	Recurrent rectal prolapse (n=79)	29 (36.7%)
Female	76 (90.5%)	Joint Urogynaecology and Colorectal surgery	8 (9.5%)
Age (years) – Median (IQR)	64 (54 – 73)	Surgical approach	
BMI – mean ± SD	25 ± 4.25	•Robotic	28 (33.3%)
Prior pelvic floor surgery (n=79)	41 (51.9%)	•Laparoscopic	56 (66.7%)
ASA (n=80)		Type of prolapse (n=61)	
•Grade II	50 (62.5%)	•High take-off	46 (75.4%)
•Grade III	17 (21.3%)	•Low take-off	15 (24.6%)
		Follow-up (days) - Median (IQR)	626 (259 – 1174)

Results (continued)

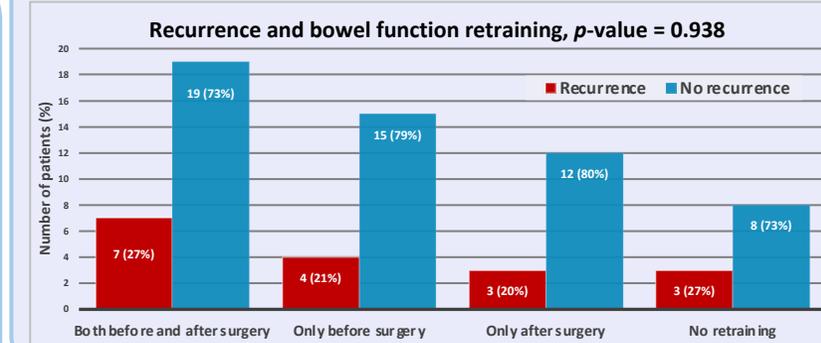


Clavien-Dindo Classification and description of post-operative complications (n=8, 9.5%)

I (Urinary retention requiring catheterisation)	1 (1.2%)
II (Constipation requiring laxatives and UTI requiring antibiotics)	6 (9.5%)
IV (intra-abdominal bleeding requiring emergency surgery and ICU stay)	1 (1.2%)

- Recurrence** (n=71, 23 patients were lost to follow-up) was **observed in 17 patients (24%)**, with 1 patient (6%) being diagnosed by defaecating proctogram and 16 by clinical examination (94%)
- Median time for first bowel function retraining appointment after surgery was 132 (IQR 74.5 – 261) days.
- Median duration to recurrence was 487 (IQR 241– 1034) days.
- No association seen between recurrence of rectal prolapse and BFR training**, sex, age, ethnicity, socioeconomic status, ASA grade, surgical history, joint Urogynaecology procedures, surgical approach, and type of rectal prolapse.

Results (continued)



Conclusion

- VMR** for rectal prolapse repair has **acceptable morbidity** with a **recurrence rate of 24%**.
- No association** between recurrence and previous rectal prolapse surgery.
- Limited generalizability of findings on BFR impact on outcomes due to **low attendance rate**. Thus, emphasizing **the need to educate patients on BFR's importance** for a desirable outcome.
- Reasons for the long wait to be explored in the bowel function clinic post-operatively (administrative versus patient factors).
- Future prospective studies are needed to explore recurrence risk factors and to ascertain if correction of pelvic floor function via BFR is crucial to good anatomic and functional outcomes after VMR.

References

- Boons, P., R. Collinson, C. Cunningham, and I. Lindsey. "Laparoscopic Ventral Rectopexy for External Rectal Prolapse Improves Constipation and Avoids de Novo Constipation." *Colorectal Disease* 12, no. 6 (2010): 526–32. <https://doi.org/10.1111/j.1463-1318.2009.01859.x>.
- D'Hoore, A., and F. Penninckx. "Laparoscopic Ventral Recto(Colpo)Pexy for Rectal Prolapse: Surgical Technique and Outcome for 109 Patients." *Surgical Endoscopy And Other Interventional Techniques* 20, no. 12 (December 1, 2006): 1919–23. <https://doi.org/10.1007/s00464-005-0485-y>.
- Li, Haoze, Ce Guo, Jiale Gao, and Hongwei Yao. "Effectiveness of Biofeedback Therapy in Patients with Bowel Dysfunction Following Rectal Cancer Surgery: A Systemic Review with Meta-Analysis." *Therapeutics and Clinical Risk Management* 18 (February 2, 2022): 71–93. <https://doi.org/10.2147/TCRM.S344375>.
- Hämäläinen, Kari-Pekka Juhani, Pirrko Raivio, Sirpa Anttila, Antero Palmu, and Jukka-Pekka Mecklin. "Biofeedback Therapy in Rectal Prolapse Patients." *Diseases of the Colon & Rectum* 39, no. 3 (1996). https://journals.lww.com/dcrjournal/fulltext/1996/39030/biofeedback_therapy_in_rectal_prolapse_patients.7.aspx.