Evaluation of anorectal functions after laparoscopic suture rectopexy with complete division of lateral rectal ligaments

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Presented by

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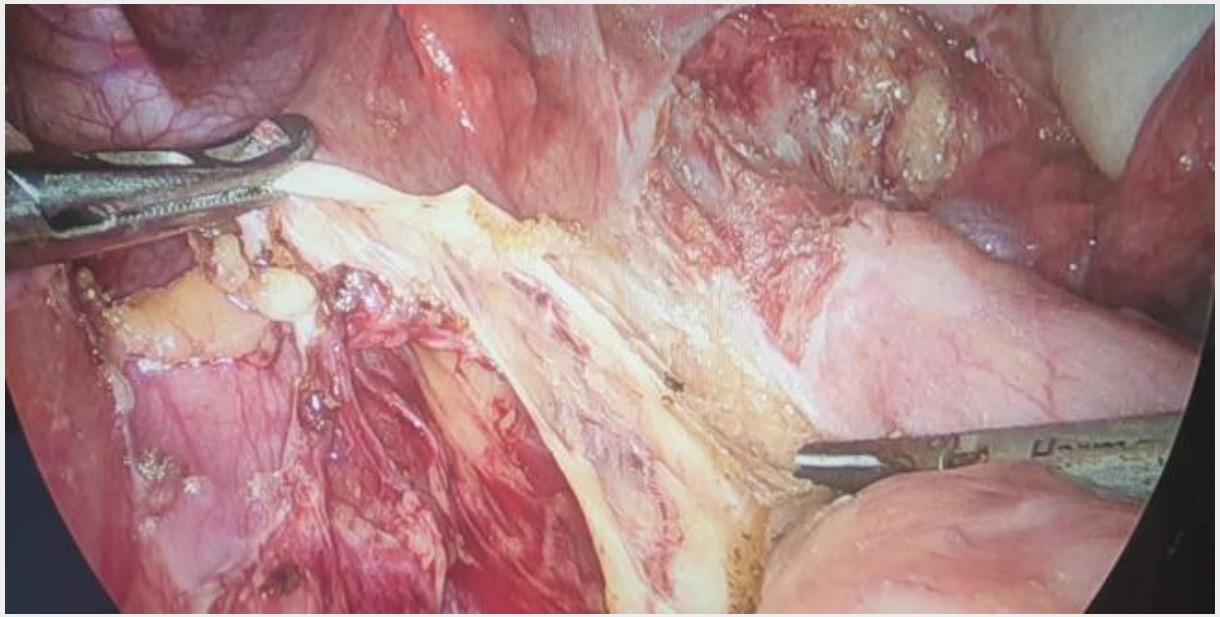
Introduction

Rectal prolapse may be complete and defined as a protrusion of the rectal wall outside the anus or hidden known as rectoanal intussception (RI) which defined as infolding of the rectal wall that does not result in protrusion from the anal canal.

Surgery is the only definitive treatment for CRP and symptomatic patients with RI who show no improvement with medical and conservatives measures.

Laparoscopic suture rectopexy may be regarded as an ideal laparoscopic procedure for rectal prolapse, it is safe procedure with low morbidity and mortality with recurrence rate less than 10%.

Dissection of the lateral rectal ligaments as part of the rectal mobilization during rectopexy has been a point of debate.



Some studies support its preservation to avoid rectal denervation and constipation and other studies reported Without ligament division, the risk of recurrent prolapse may be slightly higher.

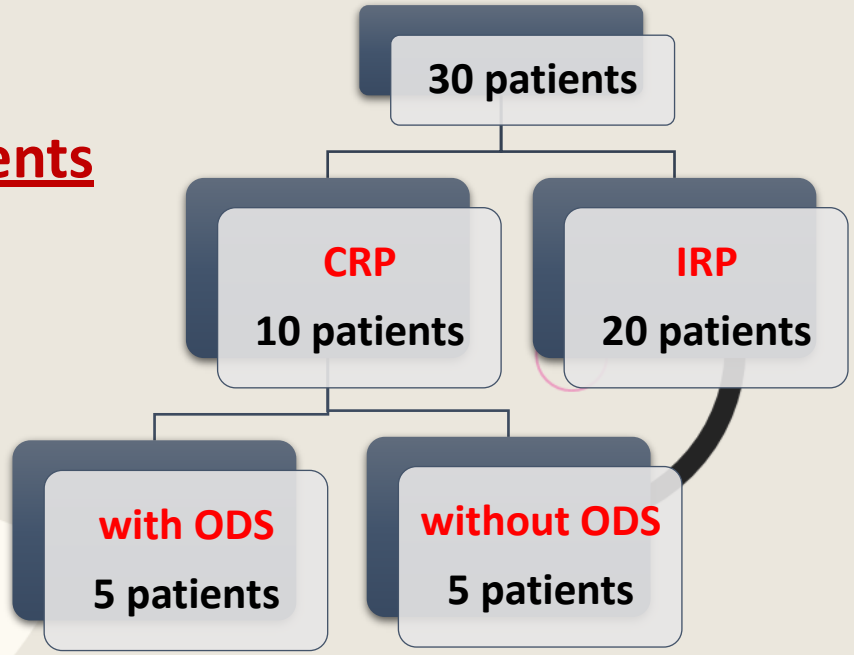
AIM of the study

- The **aim of this study** is to see does complete division of lateral ligaments during rectal mobilization really affect the functional outcome?

Patients and methods

The current prospective clinical cohort study was conducted at colorectal surgery unit, surgery department, Benha University Hospital, obtaining approval from the local ethical committee and after full informed written consent that was signed by the patients throughout the period from March 2018 till March 2021 including follow up period.

This prospective study was conducted upon **30 patients** with rectal prolapse.



Patients **included** in the study are

- Patients with Complete rectal prolapse with or without obstructed defecation symptoms
- Symptomatic patients with RI not responding to medical and conservative measures.

Exclusion criteria

- Patients with significant pelvic organs prolapse
- patients with history of pelvic radiotherapy
- patients with recurrent rectal prolapse
- Patients with rectal prolapse with fecal incontinence

Study end points:

Suture rectopexy was done with full mobilization of the rectum by complete division of lateral rectal ligaments then we evaluate :

- Obstructed defecation score
- Need of laxatives
- Rectal sensations
- Anorectal pressures
- Recurrence rate

Methods

1. **Full history and assessment of obstructed defecation by modified longo score***

2. Clinical assessment including general and local examination.

3. Full anorectal manometry done preoperative and postoperative at 6 month and 12 month.

to evaluate rectal sensations, anal sphincter pressures and for exclusion of anismus.

* Sharma S, Agarwal BB (2012) Scoring systems in evaluation of constipation and Obstructed Defecation Syndrome (ODS). JIMSA 25: 57-59.

Methods

4. Imaging

All patients were subjected to MR defecography to confirm diagnosis and to exclude pelvic organ prolapse.

5. Colonoscopy

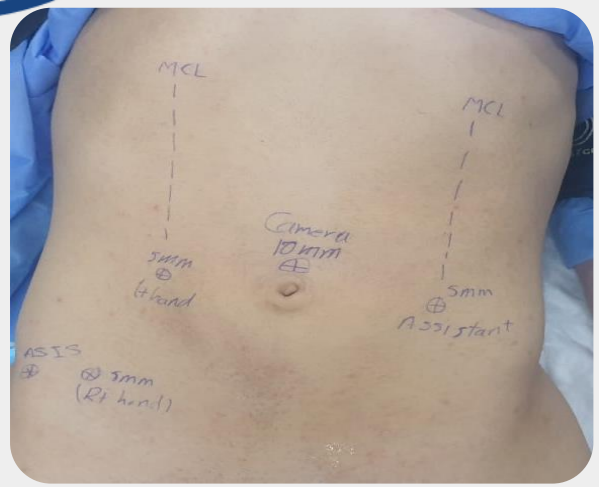
Done for all patients to exclude any proximal lesions and for biopsy from the rectal ulcer if present to exclude malignancy.

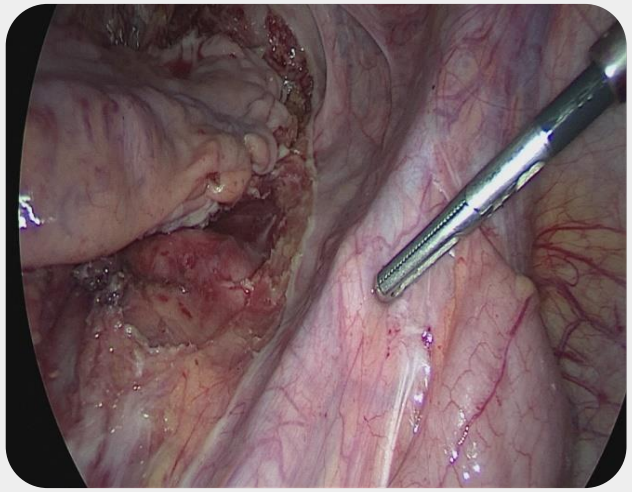
6. Routine preoperative laboratory tests.

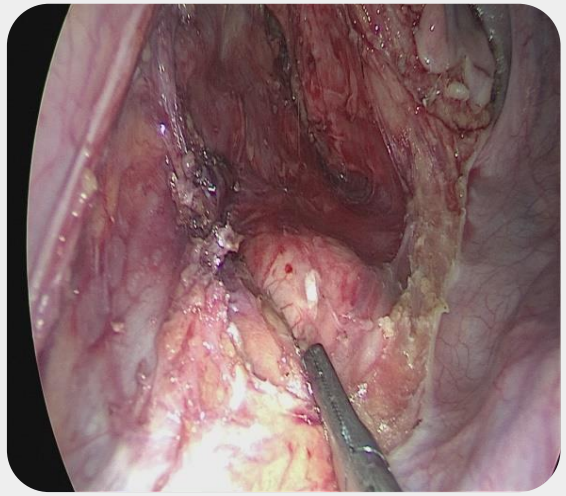
7. Assessment of constipation and quality of life preoperative and 12 months postoperative by The Patient Assessment of Constipation Quality of Life questionnaire" (PAC-QOL) which is a self-reporting questionnaire. **

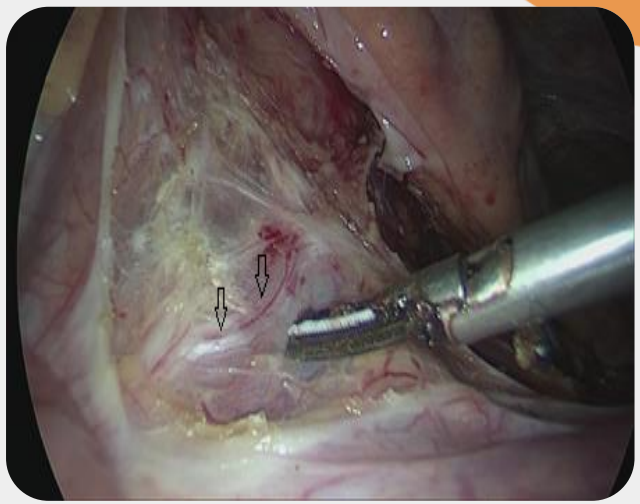
** Marquis P , De La Loge C , Dubois D , McDermott A , Chassany O . Development and validation of the patient assessment of constipation quality of life ques- tionnaire. Scand J Gastroenterol 2005;40(5):540–51 May .

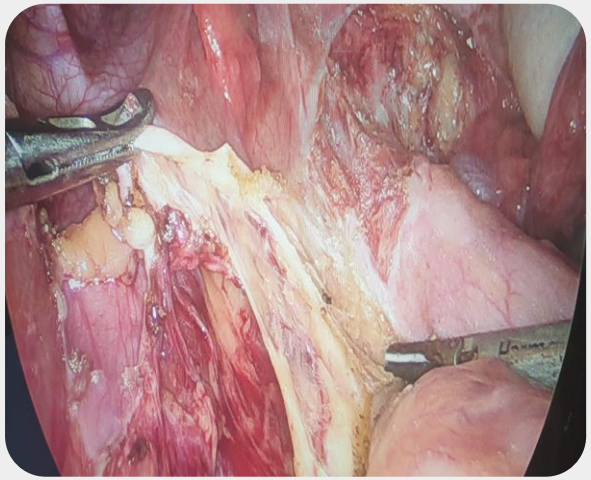
Laparoscopic surgical technique

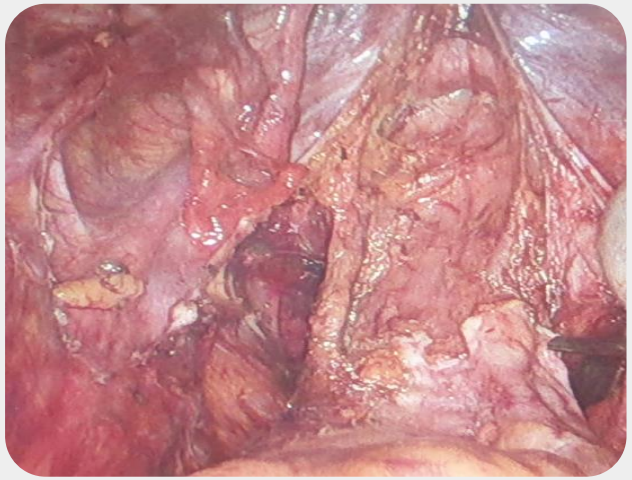


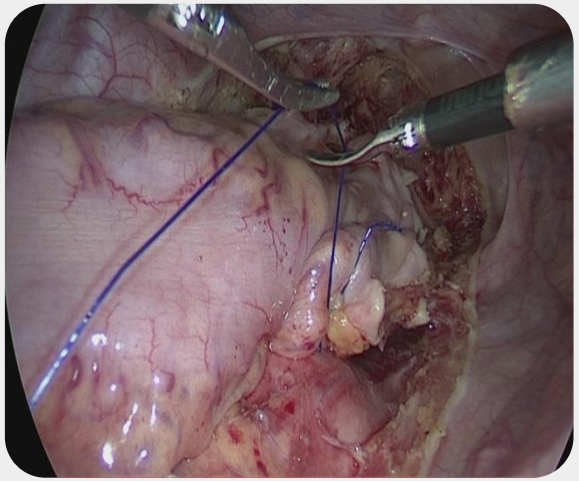


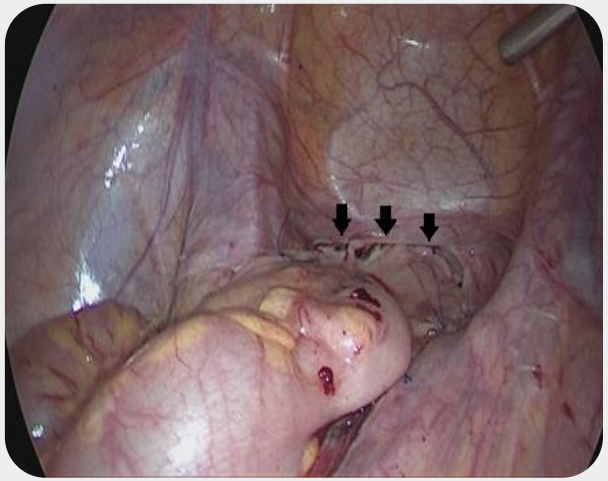








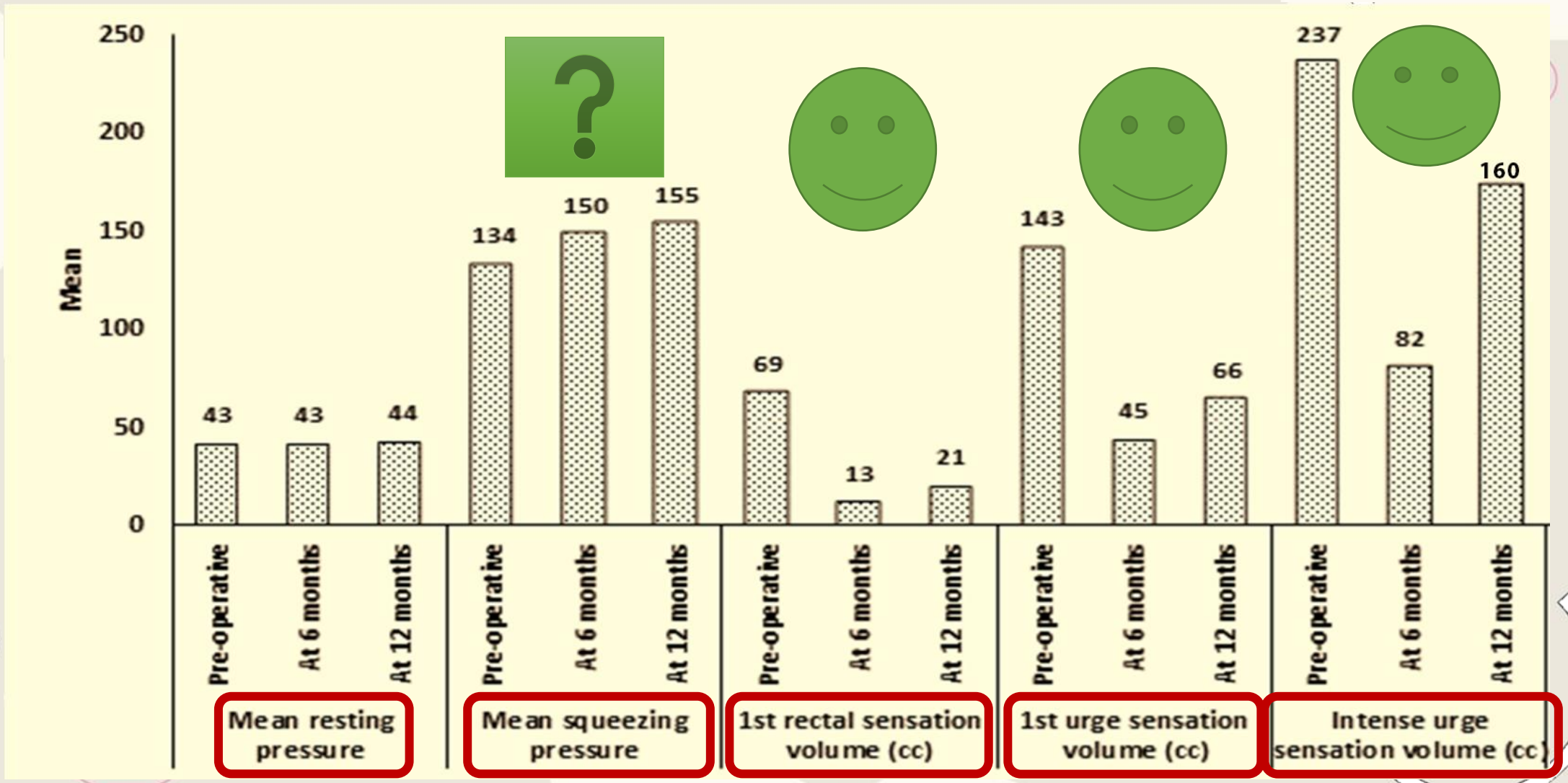




Follow up

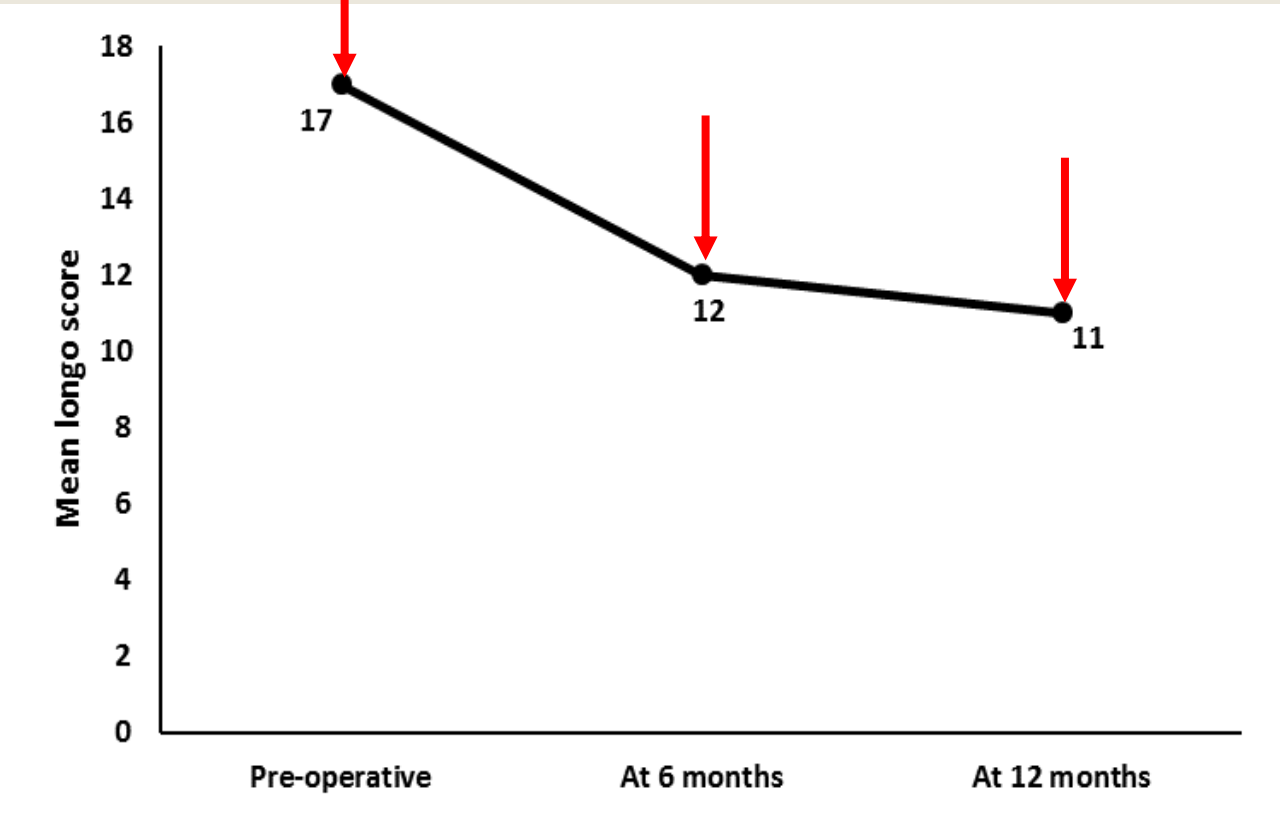
- Patients reassessed after 6 months and after 12 months by anorectal manometry and modified longo score.
- The patients revaluated by PAC-QOL after 12 months.
- Recurrence was assessed clinically and followed up to 1 year till the end of the study.

Results



Anorectal manometry finding

Modified Longo score for ODS



Significant improvement in modified longo score was noticed.

From 25 patients have obstructed defecation symptoms, 22 patients (88%) have significant improvement in ODS score postoperative.

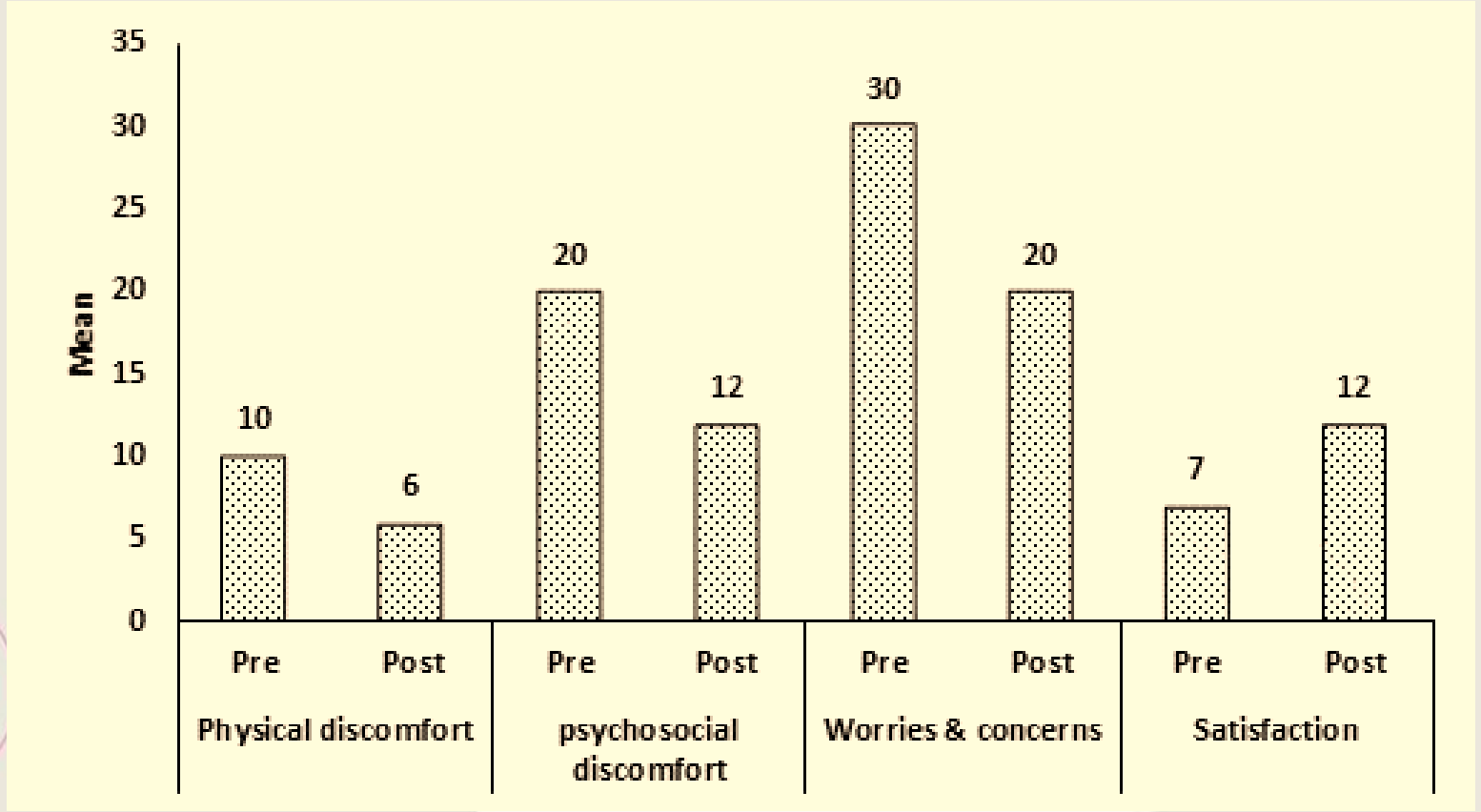
Need for laxatives

In those patients with complete rectal prolapse without obstructed defecation (OD), none of them needed laxatives postoperative. While those with obstructed defecation (OD), 72% of patients need laxatives at 6 months and decreased to 40% at 12 month which was statistically significantly with P value = 0.008

Recurrence rate

No cases of recurrence were reported in follow up period.

PAC-QOL


Mean
35
30
25
20
15
10
5
0
10
6
20
12
30
20
7
12
Pre
Post
Pre
Post
Pre
Post
Pre
Post
Physical discomfort
psychosocial discomfort
Worries & concerns
Satisfaction

CONCLUSION

- Constipation and evacuation difficulties after rectopexy remain unclear.
- Division of the lateral ligaments of the rectum was not the sole problem, because it is reported with its preservation constipation also was found and patients being dependable on laxatives.
- While dividing the lateral ligaments was related to a lower recurrence rate, which reached 0% in our research, recovery of anorectal feeling, and improvement in the obstructed defecation score.
- So constipation after surgery is unlikely to be solely due to division of lateral ligaments, other causes may be implicated

THANK YOU