



Suture rectopexy in the Management of Rectal prolapse in adults

Authors

Dr Nagesh.N.S.¹, Dr Dharmendra.B.L²

¹Department of Surgical Gastroenterology, Bangalre Medical College and Research Institute, Bengaluru

²Department of General surgery, Mysore Medical College and Research Institute, Irwin Road. Mysore

Corresponding Author

Dr Dharmendra.B.L

No 217, 4th cross, Nimishamba Layout, Kuvempunagar, Mysore 570023, India

Mobile no:9844400382, Email: drdharmu21@gmail.com

Abstract

Complete rectal prolapse is a circumferential full thickness descent of the rectum, which should be differentiated from prolapsing hemorrhoids, one of the common surgical problems we encounter which were treated by either abdominal approach or perineal approach with numerous variations in the technique.

It is a Retrospective study including cases operated for Rectal prolapse in the Department of surgical Gastroenterology from 2005 to 2015, a total of 58 cases operated for rectal prolapsed with abdominal approach, The operative procedures performed were Laparoscopic suture rectopexy (44), Lap converted open suture rectopexy (13), Open suture rectopexy(1), Re-do resection rectopexy (2), perineal repairs were excluded from the study

There were 58 cases operated totally and 44 Laparoscopic suture rectopexy and 13 Lap converted open rectopexy one case of open rectopexy. Most common symptom was H/O mass per anum, irreducible mass in 10cases, constipation in 10 cases, Hospital stay post operatively was longer for lap converted open and open rectopexy compared to laparoscopic rectopexy, complications include pelvic abscess, recurrent partial prolapse, Two cases of redo resection rectopexy, for post op persistent constipation in one case and sigmoid perforation in other case, no immediate mortality observed.

Posterior mobilization with Laparoscopic suture rectopexy is an effective and simple treatment for the complete rectal prolapse, it can be advocated in all patients fit for surgery which has lesser hospital stay and early recovery

Keywords: *laparoscopic rectopexy, suture rectopexy, Posterior mobilization.*

Introduction

Complete rectal prolapse is a circumferential full thickness descent of the rectum, which was treated by either abdominal approach or perineal approach with numerous variations in the technique commonly done abdominal surgeries include posterior or anterior mesh rectopexy,

where polypropylene mesh is commonly used, Ivalon sponge also used at some centers for fixation but all these procedures include introduction of large foreign materials. Many centers used suture rectopexy which included complete posterior mobilization with fixation with polypropylene sutures. Complete mobilization of

rectum alone without fixation also been practiced in some centers. Our study aimed at evaluation of suture rectopexy, a simple procedure in the management of rectal prolapse

Methodology

Study Design: It is a Retrospective study which include cases operated for Rectal prolapsed with abdominal approach in the Department of surgical Gastroenterology from 2005 to 2015. Total cases included in the study were 58, the operative procedure included posterior mobilization of rectum upto pelvic floor, reduction of prolapse and suture rectopexy performed where rectum was fixed with two stitches of polypropylene size 2-0 at the level 5cmdistal to sacral promontary on either side. 10 patients presented with irreducible mass were managed initially by early reduction of prolapsed mass and trendelenberg position till the edema subsided and taken for surgery.

The operative procedures performed were Laparoscopic suture rectopexy (44), Lap converted open suture rectopexy (13), Open suture rectopexy (01), Re-do resection rectopexy (02)

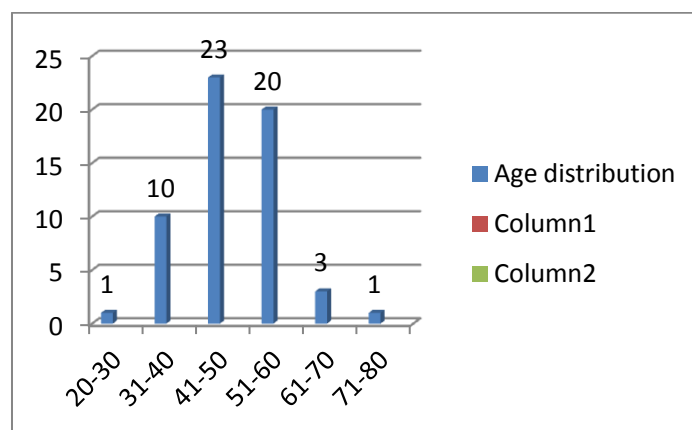
Exclusion: Perineal repairs

Results

There were 58 cases operated totally, 41 males and 17 females, most patients were in the 4th and 5th decade and Complete Laparoscopic suture rectopexy was performed in 44 cases and Lap converted open rectopexy in 13 cases and one case of open rectopexy. Open rectopexy was performed due to technical problems in the operation theater. Most common symptom was H/O mass per anum, other symptoms were bleeding per rectum, irreducible mass and constipation in 10 cases. Average operative time for lap rectopexy was 150 minutes, patient with lap converted open rectopexy had longer duration of surgery. Hospital stay post operatively was average of 2 days for laparoscopic rectopexy and 5 days for lap converted open and open rectopexy, complications were comparable with standard published studies, no immediate mortality was

observed. No symptoms related to pelvic nerve injury reported and no objective studies performed to detect pelvic nerve injuries.

| Symptoms | No |
|-------------------------------------|----|
| Mass per anum-spontaneously reduced | 48 |
| Bleeding per rectum (mild) | 22 |
| Irreducible mass per anum | 10 |



Complications

| Complications | Our study(N=58) |
|-------------------------------------|-----------------|
| Superficial Surgical site infection | 6 |
| Pelvic abscess in | 1 |
| Sigmoid perforation- | 1 |
| Recurrent partial prolapse | 2 |
| immediate mortality, | 0 |

Review: Comparing the results of laparoscopic-rectopexy

| | Leuven (N=42) | Oxford (N=85) | Our study (N=44) |
|---------------------------|---------------|---------------|------------------|
| Deaths or major morbidity | 0% | 0% | 0% |
| Minor morbidity | 5% | 13% | 4.5% |
| Recurrence | 5% | 2% | 6.8% |
| Median length of stay | 5days | 2days | 2 days |
| Improved constipation | 84% | 72% | NA |

NA: Not Assessed

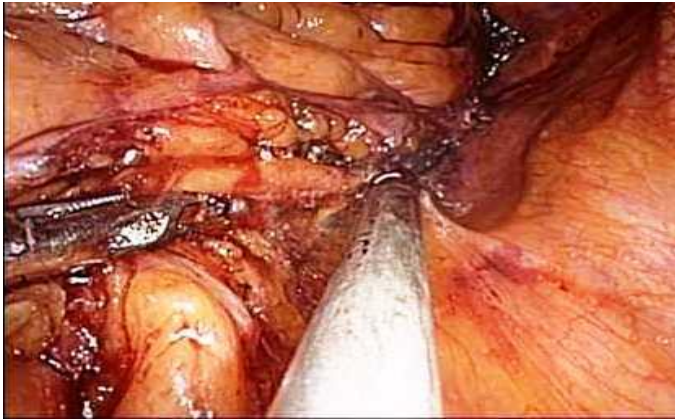


Fig:1 Laparoscopic Mobilization

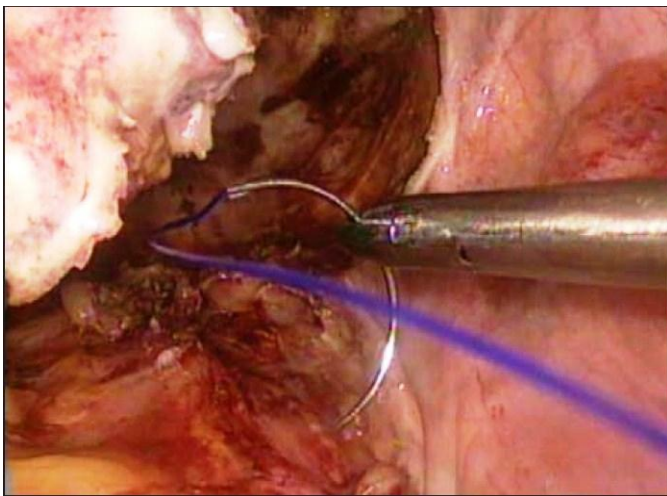


Fig 2 Laparoscopic suture rectopexy

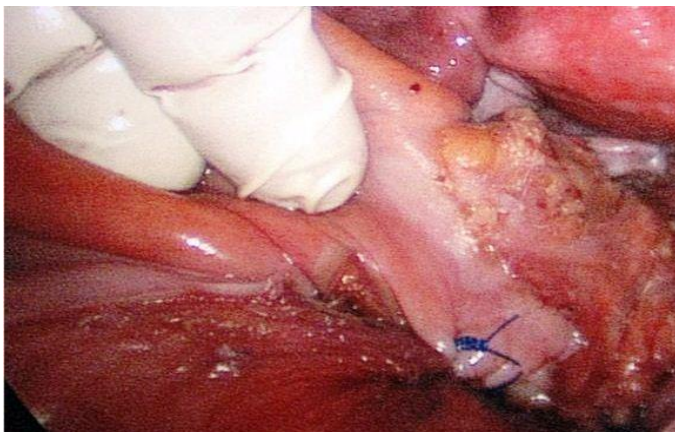


Fig 3 Open suture rectopexy

Discussion

Laparoscopic access, despite the lack of large randomized trials is becoming increasingly accepted as the approach of choice for patients undergoing rectal prolapse surgery, posterior dissection remains the most commonly used technique for patients with external rectal

prolapse, It has been shown that unless the rectal dissection to the pelvic floor is performed the recurrence rate is unacceptably high, posterior rectopexy may sometime result in worsening of constipation predominantly in patients with preop constipation,

In our study the morbidity, complications, Hospital stay are comparable with many other published studies, majority of the conversions accrued in the initial period of the study which can be attributed to learning curve and hemostatic facilities available in the early period, the most common cause for conversion was intra op bleeding. The duration of surgery also shortened in recent years with laparoscopic rectopexy and laparoscopic approach is the current approach in all cases of uncomplicated rectal prolapsed. Many centers use posterior or Anterior Mesh rectopexy as the standard procedure which might take longer operative time. The surgical skills for fixation of mesh laparoscopically needs longer learning curve and introduction of large foreign material with risk of mesh infection. Suture rectopexy can be a simple technique of fixation of rectum with comparable complication and outcome. Further studies are required to evaluate the best method for fixation of rectum after mobilization and to be compared with complete mobilization without fixation of rectum as an effective surgical treatment for rectal prolapsed.

Conclusion

Laparoscopic mobilization with suture rectopexy is an effective treatment for the complete rectal prolapse, it can be advocated in all patients fit for surgery which has lesser hospital stay and early recovery. Yet larger studies and randomized trials are required to standardize the laparoscopic approach to rectal prolapse.

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