



## Clinical and Functional Outcomes after Abdominal Mesh Rectopexy for Complete Rectal Prolapse

Dr Vishnu Sprujan, Dr R Sangeetha

(Associate Professor )

Prathima Institute of Medical Sciences , Karimnagar

Submitted: 01-12-2022

Accepted: 10-12-2022

### I. BACKGROUND

- Complete rectal prolapse is a distressing condition. It is frequently associated with incontinence because of underlying weak sphincter mechanism or presence of prolapsed protruding through the anal canal leading to poor sphincter function.
- Full thickness rectal prolapse is complete eversion of rectum through anal canal. Although it can occur at any age ,the mean age of incidence is 4-7<sup>th</sup> decade of life
- With slight male preponderance in asian countries whereas the western population has a female preponderance.
- In the past recurrence of prolapse was high but with adoption of more elaborate surgical techniques the results have improved. Another problem is persistently poor rectal function even after a successful treatment of prolapse in these patients.
- Most successful operations are those that either use a synthetic material to fix the rectum to sacrum or resect a portion of rectosigmoid
- Abdominal rectopexy has a low mortality and morbidity with recurrence rate of less than 4

### II. AIMS AND OBJECTIVES :

- To study the recurrence and postoperative complications of abdominal mesh rectopexy using prolene mesh for complete rectal prolapse.
- To study the functional results (bowel frequency, incontinence following abdominal mesh rectopexy

### III. MATERIALS & METHODS :

This is a prospective study of 12 patients admitted in Prathima Hospital of Prathima Institute of Medical Sciences, Karimnagar

with complete rectal prolapse during the period from August 2020 to August 2022.

- Patients above the age of 18 years ,with complete rectal prolapse were included.
- Patients with mucosal prolapse , rectocele ,previous complex pelvic surgeries were excluded from the study.

### IV. RESULTS

**AGE DISTRIBUTION :** In this study 12 patients were included with a mean age of 46.3 years. Most of cases were above 40 years old. Highest occurrence was seen in age group 51-60

Age in	No. of	percentag
31-40	3	25%
41-50	4	33.3%
51-60	5	41.7%

**SEX DISTRIBUTION :** There is a prominent male preponderance with male: female ratio of 1:2

Se	No.of	Percentag
Male	8	66.6%
Female	4	33.3%

**SYMPTOMS & SIGNS :** The predominant symptoms were prolapse and mucous discharge with mean duration of 6.4 months



with occasional bleeding being the next common symptom

Symptom	No. of cases with percentag	Mean
Rectal	12 (100%)	6.4
Mucus	12 (100%)	6.4
Occasional bleeding	7 (58.3%)	2.8
Loose	2 (16.6%)	2.6
constipatio	3 (25%)	12.4
Incontinence to stool/flatu	2 (16.6%)	2.4

Bowel	No. of	Percentag
constipatio	4	33.3%
1-2 times/	5	41.6%
2-3 times/	2	16.6%
More than 3/	1	8.3%

Bowel Frequency Pre Operatively : 8.3% patients had bowel frequency > 3 times /day and constipation was present in 33.3 % of

#### POST OPERATIVE COMPLICATIONS :

Complication	No.of	percentag
Hemorrhag	0	0
Prolonged	2	16%
Mesh	0	0
Wound	1	8.3%
Bladder dysfunctio	0	0
Erectile dysfunctio	0	0
mortalit	0	0

#### RECURRENCE AFTER PROLAPSE :

	No. of	percentag
Partia	nil	0
complet	nil	0

FUNCTIONAL RESULTS after abdominal mesh rectopexy : No improvement in constipation but bowel frequency decreased significantly in all cases postoperatively.

Bowel	No. of cases (preoperatively)	No. of cases(postoperatively)
Constipation	4 (33.3%)	4 (33.3%)
1-2 times/	5 (41.8%)	7 (58.3%)
2-4 times/	2 (16.6%)	nil
> 3 times/	1	nil

#### V. OUTCOMES

##### Constipation

Abdominal mesh rectopexy is shown by many to produce postoperative constipation In upto 10-47%

In our study 4 patients had constipation preoperatively and the constipation persisted postoperatively also, but we did not observe new onset constipation in any of the patients

##### Incontinence

The incidence of restored continence after a succesful abdominal mesh rectopexy is generally high In our study only 2 patients had grade 3 incontinence preoperatively , they became fully continent after surgery with a 100 % restoration of

#### VI. DISCUSSION

•Complete rectal prolapse is a distressing condition most commonly seen in adults.

• We have seen this condition predominantly in age groups around 50 years

• In our study there is a male preponderance with male: female ratio being 1:2

• All female patients were parous without any evidence of cystocele/rectocele or uterine prolapsed.

• Disordered bowel habit particularly constipation with straining is considered a predisposing factor but in our study we found that only 4 cases (33.3%) had constipation

• In our series only 2 cases (16.6%) complained of incontinence ( to liquid stool)



• Over the past 3-4 decades abdominal mesh rectopexy has become accepted management for complete rectal prolapse in patients fit enough to undergo an abdominal procedure . Several series reported zero mortality with this operation.

## VII. CONCLUSION

- Abdominal mesh rectopexy using prolene mesh produced no morbidity or mortality or recurrence in our hands
- We observed that the learning curve for this operation is low and results were easily reproducible.
- There were no significant postoperative complications including constipation/mesh infection.
- Functional results in terms of restoring continence was also excellent , therefore we consider the abdominal mesh rectopexy with prolene mesh an ideal operation for complete rectal prolapse for patients who are fit for abdominal procedure.

## REFERENCES

- [1]. Schiedeck TH, Schwandner O, Scheele J, Farke S, Bruch HP. Rectal prolapse: Which surgical option is appropriate? *Langenbecks Arch Surg.* 2005;390:8–14. [PubMed] [Google Scholar]
- [2]. Madiba T, Baig MK, Wexner SD. Surgical management of rectal prolapse. *Arch Surg.* 2005;140:63–73. [PubMed] [Google Scholar]
- [3]. Mathew MJ, Parmar AK, Reddy PK. Mesh erosion after laparoscopic posterior rectopexy: A rare complication. *J Minim Access Surg.* 2014;10:40–1. [PMC free article] [PubMed] [Google Scholar]
- [4]. Athanasiadis S, Weyand G, Heiligers J, Heumuller L, Barthelmes L. The risk of infection of three synthetic materials used in rectopexy with or without colonic resection for rectal prolapse. *Int J Colorectal Dis.* 1996;11:42–4. [PubMed] [Google Scholar]
- [5]. Sahoo MR, Anil Kumar T, Gowda MS. A single centre comparative study of laparoscopic mesh and rectopexy versus suture rectopexy. *J Minim Access Surg.* 2014;10:18–22. [PMC free article] [PubMed] [Google Scholar]
- [6]. Novell JR, Osborne MJ, Winslet MC, Lewis AA. Prospective randomised trial of Ivalon sponge versus sutured rectopexy for full-thickness rectal prolapse. *Br J Surg.* 1994;81:904–6. [PubMed] [Google Scholar]
- [7]. Stevenson AR, Stitz RW, Lumley JW. Laparoscopic assisted resection rectopexy for rectal prolapse: Early and medium follow-up. *Dis Colon Rectum.* 1998;41:46–54. [PubMed] [Google Scholar]