# ORIGINAL ARTICLE

# **External Rectal Prolapse Outcome**

OMNA YOUNUS<sup>1</sup>, MARYAM AHMED<sup>2</sup>, SAFFA ILYAS<sup>3</sup>

#### **ABSTRACT**

Aim: To assess the patient's outcome with external rectal prolapse.

**Methods:** This case series study was conducted at surgical department of Shalamar Hospital, Lahore from 22.05.2017 to 19.01.2018. Patients above age of 12 years both males and females were included in this study with complete rectal prolapse. Patients who were below the age of twelve years, recurrent prolapse, colorectal cancer, with medical issue like renal failure, acute disease of liver were excluded from study. Twenty four patients with sign of lower gastrointestinal e.g. pain, something came out from anus, bleeding per rectum and tenesmus were examined on history basis and examination. We offer resection, rectopexy and thieresch stitch to patients.

**Results:** In our study 24 patients were included in which 18(75%) were male patients and 6(25%) were females. All patients were remonstrated distress in perineum and feel to come out something from anus. The symptom period in three patients was <2 years, between 2 years to 4 years in fifteen patients and more than 4 years in six patients. Wells rectopexy was done in 21 patients, thieresch stitch was applied in one patient and two patients had anterior resection. The materials were used of kind prolene mesh in 13 patients, ivolone sponge in 3 patients and merslene mesh in 5 patients. Post-operative complication included pelvic abscess, constipation in 4 patients and wound infection in 2 patients. Immediate postoperative mortality was not seen.

**Conclusion:** Technically feasible procedure is wells abdominal rectopexy with nil rate of recurrence, hospital short stay and improves continence in most of our patients.

Keywords: Wells Abdominal Rectopexy, Prolene Mesh, Complete Rectal Prolapse, Anterior Resection,

#### INTRODUCTION

In 1968 Broden and Snellman show the principle deformity in prolapse using cineradiography to be an introversion of rectum which initially begins above peritoneal reflection<sup>1</sup>. Pelvic floor weakness, a usually related phenomenon, is possibly secondary to reappearing incident of prolapse or strain over a long time periods.

For treatment of complete rectal prolapse many operations have been described. Discontent with long term outcomes of the most of earlier techniques has led to their desertion by surgeons.

Presently the operation in practice is the cure of by fix the rectum to symphysis pubis or sacrum. Rectopexy is the most prevalent process in United Kingdom, firstly describe by Wells in 1959<sup>2</sup>. We desire to state the experience of complete rectal prolapse in twenty four patients.

#### MATERIALS AND METHODS

This case series study was conducted at Surgical Department of Shalamar Hospital, Lahore from 22.05.2017 to 19.01.2018. Total twenty four both male and female patients were selected for this study. Patients with complete rectal prolapse and above the age of 12 years were included in this study. Patients who were below the age of twelve years, recurrent prolapse, colorectal cancer, with medical issues like renal failure, acute disease of liver were excluded from study. All twenty four patients with signs of lower gastrointestinal e.g. pain, something came out from anus, bleeding per rectum and tenesmus were examined on history basis & examination. The patients were admitted from OPD (outpatient department) or in some cases refer from other primary & secondary centers.

Correspondence: omna.younus@yahoo.com 0331-1143117

Complete rectal prolapse diagnosed by the rectal examination including proctoscopy and PR. Necessary related laboratory analysis were made in Shalimar Hospital, Lahore. Patients preparation before operations include parenteral and oral both antibiotics. We offer resection, rectopexy, and thieresch stitch and wells abdominal rectopexy to all patients.

The patients were given analgesia and intravenous antibiotics after operation for first 2 days and analgesia and oral antibiotics for further five days. On first two days, daily assessment of postoperative patients was made who were shifted in ward.

# **RESULTS**

In our study twenty four patients were included. 6 (25%) were female patients and 18 (75%) were male (table-I). Most of the patients were in the age group of 21 years to 30 years (11 patients) as shown in table-II. All twenty four patients remonstrating distress in perineum and feel that something coming out from anus. The symptom during shown in table-III. Wells rectopexy was done in twenty one (21) patients, anterior resection in two (2) patients and thieresch stitch was applied in one patient (table-IV) in three patients ivolone sponge material was used for rectopexy, merslene mesh used in five and prolene mesh was used in thirteen patients as tabulated in table-V. Pelvic abscess a postoperative complication was observed in one patient, two patients had wound infection and in four patients constipation was noted as shown in table-VI.

Table-I: Sex distribution

Sex	n	%age
Female	6	25
Male	18	75

<sup>&</sup>lt;sup>1,2</sup>HO. Allied Hospital. Faisalabad.

<sup>&</sup>lt;sup>3</sup>HO, Shalamar Hospital, Lahore

Table-II: Distribution of age

Age (Years)	n	%age
12 to 20	4	16.66
21 to 30	11	45.83
31 to 40	5	20.83
41 to 50	2	8.33
51 to 60	1	4.17
>61	1	4.17

Table-III: Symptoms duration

Duration	n	%age
>4 years	6	25
2 to 4 years	15	62.50
<2 years	3	12.50

Table-IV: Repair type

. e.e.e		
Туре	n	%age
Well posterior rectopexy	21	87.50
Anterior Resection	2	8.33
Thieresch Stitch	1	4.17

Table-V: Use of material

Туре	n	%age
Prolene Mesh	13	61.90
Merslene Mesh	5	23.80
Ivolone Sponge	3	14.29

Table-VI: Complication postoperatively

Туре	n	%age
Constipation	4	16.67
Wound Infection	2	8.33
Pelvic Abscess	1	4.17

# DISCUSSION

There is no ideal and standard process to treat the complete rectal prolapse. One unanimity that we have manage to grasp after eras is that process of abdominal are linked with a low reappearance rate than perineal one which also demonstrated by Habr-Gama et al & McCoubrey in his study<sup>3</sup>. The procedures of abdominal are linked with high morbidity and prefer for young patients with associated situations as stated by Madoff and Kim et al.4,5 On the other hand, perineal process linked with low morbidity but have reappearance high rate as compare to procedures of abdominal and therefore, should be considered in mature patients with multiple comorbidities. Selective procedure has possibly improved results even though there is no aim to select a specific operation type as describe by Brown at et6. Abdominal rectopexy is the choice procedure for various surgeons due to low morbidity and rate of reappearance as we also prove in this study.

As compared to 25% female patients, 75% were male patients in our study, which may clarify on the basis of our male influenced culture. Scaglia et al also prove the male dominance and Boutsis and Huber et al was also proved it in their studies<sup>7,8,9</sup>. Keighley et al and many other studies reported that female patients were little older than male counterparts<sup>10</sup> as we also documented in our study.

No difference between both genders was found with presentation i.e., perineal distress, bleeding per rectum, mass come from anus etc.

In our series, all patients presented with main complaint that something is coming out from anus. Patients with complete rectal prolapse shown to have disorder emptying and consequently constipation also a noteworthy problem which may much general preoperatively than realize as stated by Scaglia<sup>7</sup>.

Only in 6.7% patients preoperative bleeding was noticed which was because of sutures placement in presacral fascia and resulting in injury to veins. By manual pressure & packing the bleeding was secured successfully without any problem. Due to injury to gonadal and iliac vessels bleeding was arise but in our series, it was not observed. Another complication was noted preoperatively that difficulty in placement of meshes which possibly due to diverse anatomy as Vongsangnak at el documented in his study<sup>11</sup>.

Constipation is a major postoperative drawback of abdominal rectopexy. An increase incidence of postoperative constipation reported by previous studies as 50% and also documented by Shamim and Bachoo at el<sup>12,13</sup>. Post-operatively constipation was developed in 4(16.67%) patients in our study, which was successfully treated with enriched fiber diet and use of forming agents. Postoperative constipation adequate outcome can be clarified by the fact the we did not anatomize lateral ligaments and nervi erigentes in our study. The sensitivity of rectal which has proven to impair after lateral ligament division was therefore not found significantly in patients after operation as documented by Schultz et al<sup>14</sup>. We observe that it is significant to spare lateral ligaments.

Om this present study, in the start cases, another postoperative problem i.e., 6.7% wound infection was found. The incidence was decreased by antibiotics. There was one week median hospital stay during our study. At one week total 87.50% patients were discharge and 12.50% patient's late upto seventeen postoperative day were discharge. Wound infection and pelvic abscess was the main reason for their late discharge which was treated successfully. In our study, recurrence and incontinence was not observed.

### CONCLUSION

In conclusion, the technically feasible procedure is wells abdominal rectopexy with nil rate of reappearance, improve continence and shorten the hospital stay in most of patients. Continence grade in patients significantly increase with slight constipation was treated successfully with enriched fiber diet and use of bulk forming agents.

# **REFERENCES**

- Broden B, Snellman B. Procidentia of the rectum studied with cineradiography: a contribution to the discussion of causative mechanism. Dis Colon Rectum 1968;11:330.
- Wells C. New operation for rectal prolapsed: Proceedings Royal Soc Med 1959; 52:602.
- 3 Habr-Gama A, Pinto Jr PE, Jatoba P. Rectal prolapse: results of treatment. Coloproctology 1982; 83:4-7.
- 4 Madoff Rd, Mellgren A. One hundred years of rectal prolapse surgery. Dis Colon Rectum 1999; 42; 441-50.
- Kim DS, Tsang CB, Wong WD. Complete rectal prolapse: Evolution of management and results. Dis Colon Rectum 1999; 42; 460-6
- 6 Brown Aj, Anderson JH, McKee RF, Finlay IG. Strategy for selection of type of operation for rectal prolapse based on clinical criteria. Dis Colon Rectum 2004; 47: 103-7.

- 7 Scaglia M, Fasth S, Hallgren S, Oresland T, Hullen L. Abdominal rectopexy for rectal prolapse; influence of surgical technique on function outcome. Dis colon Rectum 1994, 37:805-13.
- 8 Huber FT, Stein H, Siewert JR. Functional results after treatment of rectal prolapse with rectopexy and sigmoid resection. World J Surg 1995; 19: 138-43.
- 9 Boutsis C, Ellis H, The Ivalon sponge wrap operation for rectal prolapse with rectopexy and sigmoid resection. World J Surg 1995; 19: 138-43.
- Keighley MR, Fielding JW, Alexander WJ. Results of Marlex mesh abdominal rectopexy for rectal prolapse in 100 consecutive patients. Br J sur 1983;70:229-32.
- Vongsangnak V, Varma JS, Watters D, smith AN. Clinical Manometric and surgical aspects of complete rectal prolapse. J R Coll Surg Edin 1985;30:251-4.
- Shamim SM, Hameed K. Surgically treated rectal prolapse: experience at a teaching hospital. J Pak Med Assoc 2005; 55: 247-50.
- Bachoo P, Brazzelli M, Grant A. Surgery for complete rectal prolapse in adults. Cochrane Database Syst Rev 2000; (2): CD 001758.
- Schultz I, Mellgren A, Oberg M, Dolk A, Holmstrom B.Whole gut transit is prolonged after Ripstein rectopexy. Eur J Surg 1999; 165; 242-7.
- Brown AC, Cirocco WC, Anterior resection for the treatment of rectal prolapse: a 20-year experience. Am Surg 1993; 59: 265-9