

An Outcome of Well's Operation in the Surgical Management of Rectal Prolapse

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ABSTRACT

Objective: To see the outcome of Well's operation in the surgical management of rectal prolapse.

Study Design: Quasi Experimental study.

Place and Duration of Study: This study was carried out in Department of surgery, Liaquat University of Medical & Health Sciences, Jamshoro from 11-5-2006 to 10-05-2009.

Materials and Methods: This study consisted of 30 cases of rectal prolapse admitted through the outpatient department, as well as from casualty department of Liaquat University Hospital Jamshoro. Detailed History was taken from all the patients with special regard to the rectal prolapse. Inclusion criteria were that all the adults patients (Male and female) of rectal prolapse on the basis of history and fit for anesthesia and surgery were included in the study. Exclusion criteria included unfit patients for general anesthesia, another local pathology like haemorrhoids or rectal tumor. Data was analyzed through SPSS software.

Results: Out of 30 cases, 14(46.7%) were males and 16(53.3%) were females. There was wide variation of age with mean age + SD was 40.67 + 12.4 years. Most of the patients had constipation 23(76.7%) cases, 20(66.6%) cases were presented with Mucus discharge, 11(36.6%) cases had urinary incontinence, 09(30.0%) cases had Diarrhoea and 07(23.3%) cases had bleeding. Co-morbidity factors were diabetes mellitus in 07(23.3%) cases, hypertension was present in 09(30.0%) and IHD was found only in 02(6.7%). Ten (33.3%) cases were anemic, 05(16.66%) cases with HBsAg, 07(23.3%) had Hepatitis C and only 1(3.3%) case had dual viral infection. Complications were seen in all the cases, 28(93.3%) cases were found in majority who had pain after the procedure, 08(26.7%) cases developed the wound infection associated with retention of urine, 05(16.7%) had urinary incontinence associated with reactionary haemorrhage, 07(13.3%) had anal stenosis associated with incisional hernia, 01(3.3%) were found with ureteric damage, 03(10.0%) cases had sexual dysfunction and only 1(3.3%) case had Rectal stricture. Recurrence of rectal prolapse occurred in only 1(3.3%) patient.

Conclusion: In conclusion, this study suggests that Wells operation may be a good choice for treatment of complete rectal prolapse, in view of its low complication and recurrence rates.

Key Words: Rectal Prolapse, Well's Operation, Complications Well's Operation.

INTRODUCTION

Rectal prolapse is defined as protrusion of all layers of the rectal wall through anus and is synonymous with procidentia¹. The classic description of rectal prolapse, or procidentia, is a protrusion of the rectum beyond the anus. Complete or full-thickness rectal prolapse is the protrusion of the entire rectal wall through the anal canal; if the rectal wall has prolapsed but does not protrude through the anus. It is called an occult (internal) rectal prolapse or a rectal intussusception. Full-thickness rectal prolapse should be distinguished from mucosal prolapse in which there is protrusion of only the rectal or anal mucosa^{2,3,4}.

It has a higher incidence in advanced age, and is frequently associated with anal incontinence difficulties (in 50-70% of cases) and on occasion—constipation⁵. More than half of rectal prolapse patients complain of fecal incontinence and 15 to 65% of patients have constipation⁶. Treatment for rectal prolapse is surgical, although the technique that should be employed continues to be a matter of controversy and the choice

of technique is justified in each case according to different parameters. The perineal techniques (Delorme, Altemeier) are usually used in patients of advanced age or with high comorbidities, despite the fact that they have a higher rate of recurrence and do not offer a clear improvement in the patient's level of incontinence, while the trans-abdominal techniques, which consist of both recto-sigmoid or surgical fixation with a mesh anchored to the pubis (anterior, Ripstein) or the sacrum (posterior, Wells), have a lower incidence rate of recurrence but are more aggressive^{7,8}.

In 1999, Cuschieri described the use of the laparoscopic approach for carrying out rectopexy, and afterwards several authors have demonstrated the technical possibility and potential short-term advantages, with long-term results that are comparable to open surgery in both rate of recurrence and functional improvement (continence, constipation)⁹. A selective policy has probably improved outcome, although there is no objective method of selecting a particular type of operation¹⁰. Perineal procedures were preferred for older female patients and co morbid patients were

associated with a shorter operative time and hospital stay¹¹.

MATERIALS AND METHODS

This study was conducted at surgical department, Liaquat University of Medical & Health Sciences, Jamshoro from 11-5-2006 to 10-05-2009. This study consisted of 30 cases of rectal prolapse admitted through the outpatient department, as well as from casualty department of Liaquat University Hospital Jamshoro. Detailed History was taken from all the patients with special regard to the rectal prolapse. Inclusion criteria were that all the adults patients (Male and female) of rectal prolapse on the basis of history and fit for anesthesia and surgery were included in the study. Exclusion criteria included unfit patients for general anesthesia, another local pathology like haemorrhoids or rectal tumor. Data was analyzed through SPSS software.

RESULTS

The 30 cases of rectal prolapse were admitted. Out of 30 cases, 14(46.7%) were males and 16(53.3%) were females (Chart 1). There was wide variation of age with mean age + SD was 40.67 + 12.4 years. All the cases were found with different sign and symptoms (Chart 2). Out of these 30 cases, most of the patients had constipation 23(76.7%) cases, 20(66.6%) cases were presented with Mucus discharge, 11(36.6%) cases had urinary incontinence, 09(30.0%) cases had Diarrhoea and 07(23.3%) cases had bleeding. Co-morbidity factors were diabetes mellitus in 07(23.3%) cases, hypertension was present in 09(30.0%) and IHD was found only in 02(6.7%). Ten (33.3%) cases were anemic, 05(16.66%) cases with HBsAg, 07(23.3%) had Hepatitis C and only 1(3.3%) case had dual viral infection.

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DISCUSSION

Rectal prolapse is a disabling condition and a difficult problem for both the patients and the clinicians. The majority of sufferers are elderly, multiparous women, often with psycho-griatric problems. Difficulty with evacuation of the rectum occurs in 50% of the cases and

constipation in upto 25%, while faecal incontinence occurs in about 60%¹².

Many surgical techniques –both through the perineal and abdominal routes– have been described for the treatment of rectal prolapse. Wells method is associated with a low risk of complications and reoccurrence of rectal prolapse.

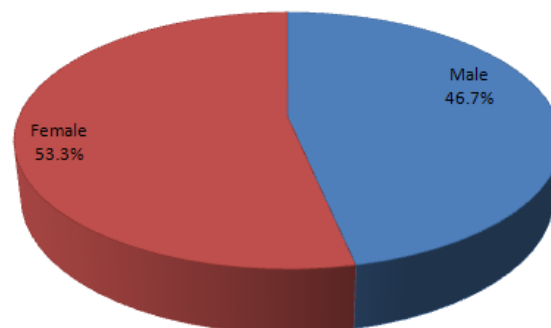


Chart No.1: Gender

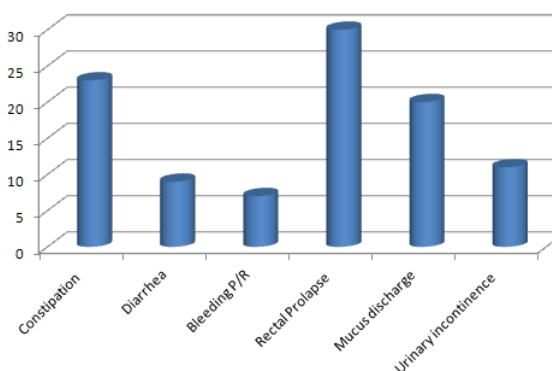


Chart No.2: Presenting Sign and Symptoms of Patients

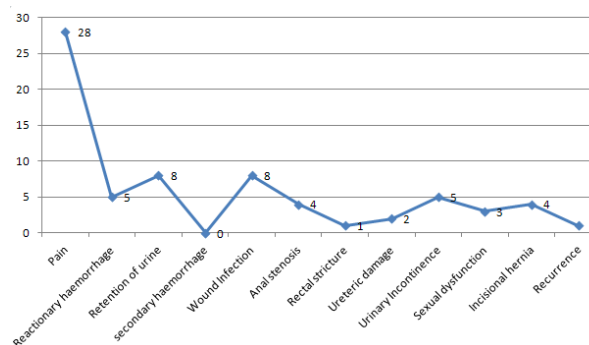


Chart No.3: Complications

There is no finest or regular procedure for treatment of rectal prolapse. In overload of a hundred different operations have been described so far, only a few are in practice today^{13,14,15}. There are more than five hundred published papers on this topic, but only a small number of relevant clinical trials have been conducted to find the "best" operation, and even their usefulness is

severely limited because of small sample size and other methodological weaknesses¹³.

One consensus that we have managed to reach after decades of research is that the abdominal procedures are associated with a lower recurrence rate. Abdominal rectopexy was the most commonly performed procedure at our centre, perhaps because of its excellent results in literature, both in terms of recurrence and incontinence. Most surgeons once considered this procedure as the operation of choice for the control of prolapse in the elderly patients¹¹.

Abdominal procedure like Well's involve the use of foreign material like prolence mesh and fixing it to the sacrum. The complications included pelvic infection, erosion of foreign material and fistula formation and stenosis. The rectal prolapse is usually associated with incontinence due to increased sigmoid motility, due to increased resting and squeeze pressure and persistent rectoanal inhibition¹².

The results of this study showed that 93.3% cases had pain, 16.7% had Reactionary haemorrhage, 26.7% developed Retention of urine, wound infection was present in 26.7% cases, 13.3% had Anal stenosis, 3.3% had Rectal stricture, 6.7% cases had Ureteric damage, 16.7% had Urinary Incontinence, 10.0% had sexual dysfunction, 13.3% had Incisional hernia and only 3.3% had recurrence out of 30 patients. In an other study 2 patients were operated by Wells operation and there was no recurrence or complications¹² while in the observation of Marderstein EL et al.¹⁶ 89.3% cases had pain, 13.2% had reactionary haemorrhage, 22.4% developed retention of urine, wound infection was present in 7.1% cases, 9.3% had Anal stenosis, 1.7% had rectal stricture, 5.2% cases had Ureteric damage, 13.7% had Urinary Incontinence, 8.0% had sexual dysfunction, 11.3% had Incisional hernia and only 1.3% had recurrence out of 14 cases. In another study conducted by Bo Holmstrom et al¹⁷, the recurrence rate in his study was 4.1% and surgical complications occurred in an additional 3.7% which is similar to this study.

Overall morbidity rate in the present study was 11% out of 30 cases of rectal prolapse with complete follow up time of six months. Same observation was noted in the study of Safar B et al¹⁸. There was no mortality rate in this study and similarly in a study of Mahmud Aurangzeb et al¹⁹, mortality rate was not found in his study out of 34 cases.

CONCLUSION

Many procedures have been devised for the treatment of rectal prolapse; generally, these can be divided into perineal and abdominal approaches. Abdominal procedure (Wells procedure) is ideal for young healthy patients and is associated with lower recurrence rate, low morbidity and rapid postoperative recovery. For these reasons Wells rectopexy has become the

treatment of choice for many surgeons even for those patients with a significant co-morbidity.

The ideal surgical technique should, therefore, be based not only on the elements of simplicity, recurrence and complications, but should also take into account the treatment or at least alleviation of the functional disorder so commonly associated with rectal prolapse.

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