ORIGINAL ARTICLE

Rectal Prolapse in Children: Management of Early Presented, Maltreated and Relapsed Cases

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ABSTRACT

Aim: To analyze and compare the results of management of early presented, late and relapsed complicated cases of rectal prolapse in pediatric age group and to make a protocol according to the clinical condition, duration and severity of disease.
Study design: - Descriptive and prospective study.
Place and duration:- Children complex, Ibn-e-Siena Hospital and Research Institute of Multan Medical and Dental College, Multan from June 2013 to January 2017.
Methodology: - A total no. of 43 patients, up to the age of 12 years, diagnosed as the cases of rectal prolapse were admitted and managed conservatively as well as surgically.
Results: Out of 43 cases with rectal prolapse, 2 cases were initially diagnosed with rectal polyps cured with polypectomy. In remaining cases conservative management of early presented cases -15. Old maltreated relapsed cases – 26. Relieved with conservative management – 13. Relapsed after conservative management – 2. Thiersch stitch was applied in 16 cases. Successful in 13 cases and failure in 3 cases. Waiting for further management – 18. Sclerosing injection therapy applied in 15 cases. 12 cases were cured. The remaining 3 complicated cases were managed with Delorme's operation.
Conclusion: - Conservative measures are the best for the early presented cases. The initial surgical procedure recommended in early presented cases not relieved after conservative management is Thiersch stitch. In maltreated, relapsed and with congenital anomalies, sclerosing injection therapy is the procedure of choice. Major surgical procedures are rarely used and are reserved only after the very critical cases.
Keywords: - Rectal prolapse in children

INTRODUCTION

Rectal prolapse is the inside out coming of rectal mucosa or full thickness wall or in other words sliding out of rectal mucosa or wall through the anal opening. Most of these children are otherwise anatomically normal and this phenomenon is always painless, ending with spontaneous reduction. In chronic cases mostly manual reduction is required. During this maneuver of manual reduction, the chances of bleeding and ulceration may occur[1].

The predisposing factors are straining of stool or reluctant for defecation. So this straining may be due to diarrhea or constipation. The diarrhea may be of any type but associated with malnutrition, celiac disease or enterocolitis of Hirschsprungs' disease are frequently evolved to produce the more straining in diarrhea. The other causes of rectal prolapsed in children are "paralysis of anal sphincter" malnourishment and prolapse after the anorectal surgery[2].

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The paralyzed anal sphincter in children is frequently seen in meningomyelocele and high variety cases of anorectal malformations. The malnourished hypotonic infants are always prone to rectal prolapse. In extrophy bladder, the pubic symphysis is always separated with diverication of puborectalis muscle with failure to angulate the rectosigmoid junction resulting with rectal prolapse. Rectal prolapse may result as a complication of any anorectal surgery particularly in the cases of high variety anorectal malformation[3]. As far as the management is concerned, initially all these cases were tried to manage with conservative measures. The common causes i.e., constipation and diarrhea[4] are treated accordingly to their protocol. If straining is due to rectal polyp[5], polypectomy relieves this problem of rectal prolapse with immediate effect.

Along with the medical management of diarrhea and constipation the pathophysiology of rectal prolapsed i.e., straining at the pelvic floor is also managed with the toilet training by avoiding the squatting position during defecation with the use of sitting pot or chair with a hole sometimes some sedation may also be advised to avoid the emotional stress during defecation[6]. If these conservative

measurements fail, then other interventional measures are adopted according to the severity of the disease. In this regard Thiersch stitch[7] and sclerosing injections therapy[8,9] are the procedures of choice. The other major surgical procedures are rarely practiced and are reserved for the relapsed complicated cases[10,27].

RESULTS

Total 43 patients, 30 male and 13 female up to the age of 12 years were admitted and managed. Two cases of rectal polyp were very early diagnosed and cured after rectal polypectomy. In remaining 41 cases, 15 patients were with early presentation while 26 were chronic malnourished, maltreated and relapsed cases. The early presented 15 patients were managed with conservative measures. 13 patients were cured while 2 cases of chronic diarrhea were relapsed. Now we had 28 cases (26 already old cases + 2 cases not responded to the conservative management). Among these 28 cases, 16 patients were considered to be suitable for Thiersch stitch application but this was successful in 13 cases with the relapse of 3 cases. Now we had 15 cases for further management. In these 15 cases sclerosing injection therapy was applied with single or repeated after some interval. In this way 12 cases werecompletely cured. There were failure in 3 old maltreated multiple time operated and neglected cases. Finally 3 cases were managed with Delorme's operation.

Table-I: Age distribution (n=43)

Age (years)	n	%age
0-2	07	16.3
3-4	05	11.2
5-6	04	09.3
7-8	07	16.3
9-10	12	27.9
11-12	08	18.6

Table-II: Causes of rectal prolapse (n=43)

Causes	n	%age
Diarrhea	08	18.6
Constipation	05	11.6
Worms infestation	02	04.6
Idiopathic	2	04.6
Maltreated/relapsed	15	34.9
Meningomyelocele	02	04.6
Enterocolitis hirschsprungs disease	03	07.0
Extrophy bladder	01	02.3
Postsurgical anorectal surgical cases	03	07.0
Rectal polup	02	04.6

Table-III: Results of management (n=43)

Procedure	n	%age
Conservative management	13	302
Theirs stitch	13	30.2
Sclerosing injection therapy	12	27.9
Polypectomy	02	06.6
Delomrem	03	07.0

DISCUSSION

This study was conducted at Children Complex of Ibn-e-Siena Hospital and Research Institute of Multan Medical and Dental College, Multan. Total number of 43 patients was managed from June 2013 to January 2017. In this study the children of both sexes up to the age of 12 years with rectal prolapse were managed. These children with rectal prolapse were divided into 2 groups i.e., the early presented and late multiple times maltreated and relapsed cases[11,12].

Initially all the early presented cases were managed conservatively[13]. The diarrhea and constipation were managed medically along with the advice of avoiding the squatting position in defecation with the use of sitting pot or chair with a hole to support the pelvic floor. The patients with rectal polyp were operated with immediate good results. These patients with proctitis and worms infestation were managed accordingly with immediate relief[14].

Those patients who did not respond to conservative measures were managed with Thiersch stitch operation, sub mucosal sclerosing injection therapy and finally with surgery[15,16,26]. Fifteen cases presented early were easily managed with the conservative management[17]. In chronic maltreated, multiple times operated from the untrained practitioners, were planned to be manage with Thiersch stitch operation[18] or sclerosing injection therapy[19]. Thiersch stitch operation is being treated to overcome the acute or chronic cases of rectal prolapsed since 1912. It is simple surgical procedure, short hospital stay, less cost and comparatively with fewer side effects. So in early and somewhat chronic cases, Thiersch stitch is the first line management.

Most of the workers still prefer it as a simple remedy even in the initial cases and also in some relapsed cases[20]. In this procedure different people uses different materials i.e., silver wire, nylon thread, chromic catgut or vicral. There are advantages and disadvantages of these different suture materials. The results may depend upon the technique used or the personal experience of the surgeon. We used vicral 2^0 with double suture with knots on opposite side at 6 & 12O'clock positions. We used it in 16 cases while relapse occurred only in 3 cases so we consider it the first option after the failure of conservative management.

Arshad Kamal in his study found no complication. Similarly other researchers found it suitable simple and considered it still the procedure of choice in routine cases of rectal prolapse[7,18,19,20], which is modified double suture technique. In this study it was declared that it was a suitable procedure after the failure of conservative management. In this study there were 18 chronic multiple times maltreated relapsed cases; where the simple conservative or Thiersch stitch operation was not considered to be suitable and beneficial. In these cases sclerosing injection therapy was selected. Initially 5% phenol in almond oil was the classical sclerosing agent used for this. Now 30-70% alcohol is commonly used as a sclerosing agent in rectal prolapse[21,22,23,28]. The number of attempts depends upon the severity and the degree of prolapse. In this study, 18 patients were managed with 30% alcohol with the satisfactory results in 15%, only 3 patients remained untreated after all these measures of conservative management, Thiersch stitch application and sclerosing injection therapy. These multiple time maltreated cases were managed with Delorme's operation[24, 25].

CONCLUSION

In the management of paediatric rectal prolapse from early to late complicated cases, conservative management is the first line treatment for the early presented cases. Thiersch stitch application should be reserved for the early treated relapsed cases and routine uncomplicated cases. Sclerosing injection therapy is the procedure of choice for the maltreated and old standing cases. Major surgical procedures should be reserved for multiple time maltreated and old neglected cases.

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