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RESEARCH ARTICLE

SETON FOR MANAGEMENT OF HIGH ANAL FISTULA- TREATMENT EXPERIENCE IN RIMS, RANCHI

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ABSTRACT

Introduction: Treatment of anal fistula is surgical. Seton has been in use for fistula treatment for many years. In this study we have used cutting Seton along with partial excision of the fistula tract for treatment of high type fistula. **Material and Methods:** 30 cases of trans-sphincteric high type anal fistula were treated by partial excision of fistula tract and use of cutting Seton. Patients were followed up for 6 months after treatment. Population characteristics, treatment received and follow-up data was analyzed. **Discussion and Conclusion:** Most patients were male. Posterior fistula was more common than the anterior one. Postoperative complications were minor and managed conservatively. No case of recurrence or fecal incontinence was seen on follow-up. Treatment by partial excision of fistula tract and cutting Seton produces satisfactory results.

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INTRODUCTION

Park's classification of fistula based on the location of its tract in relation to anal sphincter muscle classifies fistula in following categories: submucosal, intersphincteric, transsphincteric, suprasphincteric and extrasphincteric (Parks, 1976). Treatment of anal fistulas is surgical. Basic aims of fistula surgery are to remove the fistula tract, to prevent postoperative recurrence and to avoid sphincter damage. Most of the time fistula can be treated by either fistulotomy/laying open of fistula tract or fistulectomy/excision of fistula tract (Seow-Choen, 1992). However, when the fistula crosses the external anal sphincter these treatment modalities divides sphincter muscle and put the patient at risk for impaired fecal continence in proportion to the quantity of muscle involved. A Seton is a thread which can be used for treatment of fistula. Seton has been used for treatment high and complex anal fistula for many years. Hippocrates described use of Seton made of raw lint and horsehair. Nowadays many types of setons are available in the market, common ones are different types of suture material, rubber, wire, and medicated threads like kshar sutra (Mc Courtney, 1995 and Goodsall,, 1990). In this study we have used polypropylene suture as seton. Seton can be used as an adjunct to primary fistula surgery for drainage purpose. It can also be used as single treatment modality in the form of cutting Seton. In this study we have used cutting Seton along with partial excision of fistula tract for the treatment of high anal fistula.

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MATERIALS AND METHODS

This is a prospective study done over a period of 1 year (March 2017 to February 2018) in the department of general surgery, RIMS, Ranchi, Jharkhand.

- The study population consisted of 30 cases of trans-sphincteric anal fistula

Exclusion Criteria

- Pediatric age group
- Very superficial/low type anal fistula

- Fistulae associated with other diseases like malignancy, IBD etc.
- All subjects were explained about the study and written consent was taken for their participation in the study.
- Preoperative baseline routine investigations and fistulogram were done in all subjects.

Operative technique: after preanesthetic checkup and bowel preparation, patients were put for surgery. Surgery was done in lithotomy position. Fistula tract was injected with mythelene blue dye which stains the tract and helps in localization. Malleable probe was passed through external opening bringing the tip of the probe out through internal opening. Fistula tract excision was progressed from external opening towards internal opening until sphincter complex was reached. From this point nonabsorbable Seton was passed and brought out through internal opening. This Seton was tightened, haemostasis secured and dressing done. Sitz bath was started from 24 hours postoperatively onwards. Patients were advised to eat easily digestible food material and drink plenty of water. They were prescribed stool softener and were discharged when they were stable.

- Patients were followed up weekly and Seton was tightened every week till entire fistula tract was cut and Seton came out. After this patients were followed at monthly interval for 6 more months to look for any complication or recurrence.
- Patient particulars, character of fistula, investigations done and intra-operative & post-operative complications in each case were recorded in a data collection sheet.
- Statistical analysis was done using *IBM SPSS Statistics 23* software.

RESULTS

Sex distribution of study population: In this study out of 30 patients, 22 (73.3%) were male and 8 (26.6%) were female.

Sex of patient	Number of patients
Male	22
Female	8

Age distribution of study population: Mean age of study population is 40.2 years. Study population was divided in 4 age groups. 1 patient was <20 years age, 12 patients were in 20-30 years age group, 14 patients were in 30-40 years age group and 3 patients were >40 years of age.

Age groups	Number of patients
<20 years	1
20-30 years	12
30-40 years	14
>40 years	3

Anterior versus posterior fistula: In this study 26 (86.6%) cases were posterior anal fistula and only 4 cases were of anterior type

Type of fistula	Number of patients
Anterior fistula	4
Posterior fistula	26

Complications associated with treatment: Complications following treatment as described above include bleeding in 2 (6.6%) cases, infection in 6(20%) cases, and discomfort due to irritation from Seton in 12 (40%) cases. No cases of postoperative incontinence or recurrent fistula were seen.

Associated complications	Number of patients
Bleeding	2
Infection	6
Discomfort due to seton	12
Incontinence	0
Recurrence	0

DISCUSSION

Similar to the study done by Salah M et al, in our study also most of the fistula patients (73.3%) were male (Salah, 2016). Mean age of study population in this study is 40.2 years which is similar to many other studies (Seow-Choen, 1992 and Goodsall, 1990). Fistulas can be described as anterior or posterior relating to a line drawn in the coronal plane across the anus. Anterior fistulas will have a direct track into the anal canal. Posterior fistulas will have a curved track with their internal opening lying in the posterior midline of the anal canal. An exception to the rule are anterior fistulas lying more than 2.5 cm from the anus, which may have a curved track (similar to posterior fistulas) that opens into the posterior midline of the anal canal. This rule is known as Goods all's rule and is named after David Henry Goods all who described it in 1900. In our study most of the cases (86.6%) were posterior fistula. In this study all the patient of fistula were treated completely within 2 months of beginning of the procedure. The cutting Seton was tightened at weekly interval and came out completely within this time period. Few complication noted during treatment and follow up are bleeding in 2 (6.6%) cases which was treated conservatively, surgical site infection in 6 (20%) cases which was cured by antiseptic sitz bath and discomfort due to foreign body sensation in 12 (40%) cases who needed counseling. At 6 months follow-up period, no case of incontinence or recurrence was seen in this study.

Conclusion

For high anal fistula partial excision of fistula tract along with use of cutting Seton is a treatment option with satisfactory results. Larger study with bigger study population needs to be done to confirm the results.

REFERENCES

Buchanan G, Owen H, Torkington J, Luniss P, Nicholls RJ, Cohen R. 2004. Long-term outcome following loose-seton technique for external sphincter preservation in complex anal fistula. *Br J Surg.*, 91:476–480. doi: 10.1002/bjs.4466.

Durgun, V., Perek, A., Kapan, M., et al. 2002. Partial fistulotomy and modified cutting seton procedure in the treatment of high extrasphincteric perianal fistulae. *Dig Surg.,* 19: 56–58

García Olmo, D., Vázquez Aragón, P., López Fando, J. 1997. Multiple setons in the treatment transsphincteric anal fistula. *Dis Colon Rectum*., 40:731–732.

Goodsall, D.H., W.E. Miles. 1990. Ano-rectal fistula. Diseases of the anus and rectum, Longmans, Green & Co., London pp. 92-137

Hammond, T.M., Knowles, C.H., Porrett, T., Lunniss, P.J. 2006. The snug seton: short- and medium-term results of slow fistulotomy for idiopathic anal fistulae. *Colorectal Dis* 8: 328–337.

J.S Mc Courtney and Finlay IG. Review seton in the surgical management of fistula in ano. *Br J Surg* 1995; 82:448-52.

Marks CG, Ritchie JK. 1977. Anal fitulus at St Mark s Hospital. *Br J Surg,* 64: 84-91

Parks AG, Gordan PH, Hardcastle AD. 1979. A classification of fistula-inano. *Br J Surg*., 63:1-12.

Pearl RK, Andrews JR, Orsay CP, Weisman RI, Prasad ML,Nelson RL, et al. 1993. Role of the seton in the management of anorectal fistulas. *Dis Colon Rectum.,* 36:573–9.

Salah M. Raslan, Mohammed Aladwani, Nasser Alsaneac. Evaluation of the cutting seton as a methodof treatment for perianal fistula. Ann Saudi Med 2016; 36(3): 210-215

Seow-Choen F, Nicholls RJ. 1992. Anal fistula. *Br J Surg* 79:197-205.

Walfisch S, Menachem Y, Koretz M: 1994. Double seton – a new modified approach to high of high perianal fistula. *Br J Surg,* 81: 136–137.

Williams JG, MacLeod CA, Rothenberger DA, Goldberg SM. 1991. Seton treatment of high anal fistulae. *Br J Surg* 78:1159–1161.

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