
RE-ROUTING IN HIGH ANAL FISTULA

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Summary

Fourteen patients with high anal fistulae were treated at Basrah General Hospital from 1992 to 2000 by re-routing of the track and the external opening to the anal canal. All patients had satisfactory results, with a period of follow up ranging from 10 to 91 months, no recurrence of fistulae or abscess formation. Healing was rapid, short hospital stay and continence to flatus and faeces preserved. The advantages of the re-routing over other techniques for the treatment of high anal fistula are discussed. We have found our procedure to be useful in treatment of high anal fistula.

Introduction

Most anal fistulae can be managed by laying open the track. The importance of deciding whether a fistula is a low or a high type is that a low level fistula can be laid open without fear of mucus leakage, incomplete control of flatus or faeces and later mucosal prolapse¹⁻⁴. While in high anal fistula, the dilemma is how to obtain adequate results without producing any degree of incontinence; many such cases treated by conventional procedures require weeks or months to achieve healing, and some are given temporary colostomy^{1,5,6}.

Both Roschke and Park devised ways

of diminishing the sacrifice of muscle that conventional laying-open techniques demand, but these operations are not uniformly successful when applied by others, and the Park's method sometimes entails frequent re-examinations and curettage procedures under general anaesthesia to achieve success, with consequent expenses and loss of earnings for patients, as well as the risks of repeated anaesthesia^{2,7,8}. To preserve the sphincteric mechanism, high anal fistulae have been treated by a two stage procedure combined with the use of a seton. In most of these cases some loss of muscle function is inevitable⁹⁻¹². Elting and Laird presented a new method by sliding flap advancement with negligible loss of sphincter muscle^{3,4,13-15}.

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This study was undertaken to assess the results of re-routing high fistula tracks, both extra and inter sphincteric into the anal canal and to identify risk factors for fistula recurrence and disturbed continence.

Patients and Methods

Fourteen patients with high anal fistula were treated from Oct. 1992 to Oct.2000 at Basrah General Hospital. They were 13 males and one female, their ages ranged between 28 to 48 years (average 35.2). No patient with inflammatory bowel disease or tuberculosis was included in this study. Of the 14 patients, eleven had posterior fistulae and 3 had anterior fistulae. Two patients had history of previous operations for fistula. All patients had a single track.

Technique:

The patient is placed in lithotomy position. After assessing the extent and disposition of the fistula by palpation and the gentle use of a probe which is kept as a guide for dissection. The skin around the external opening is elliptically incised and the track is dissected as high as possible. Anal speculum is introduced and a fine tipped mosquito forceps is passed through the wall of the anal canal to reach the dissected fistula track. The free end of the track is grasped by the mosquito forceps. The track is pulled into the anal canal trimmed and its edges sutured to the mucosa of the anal canal by interrupted polyglycolic acid sutures [2/0]. The end result is an anal fistula draining internally, Fig. I (A-E) illustrate the procedure.

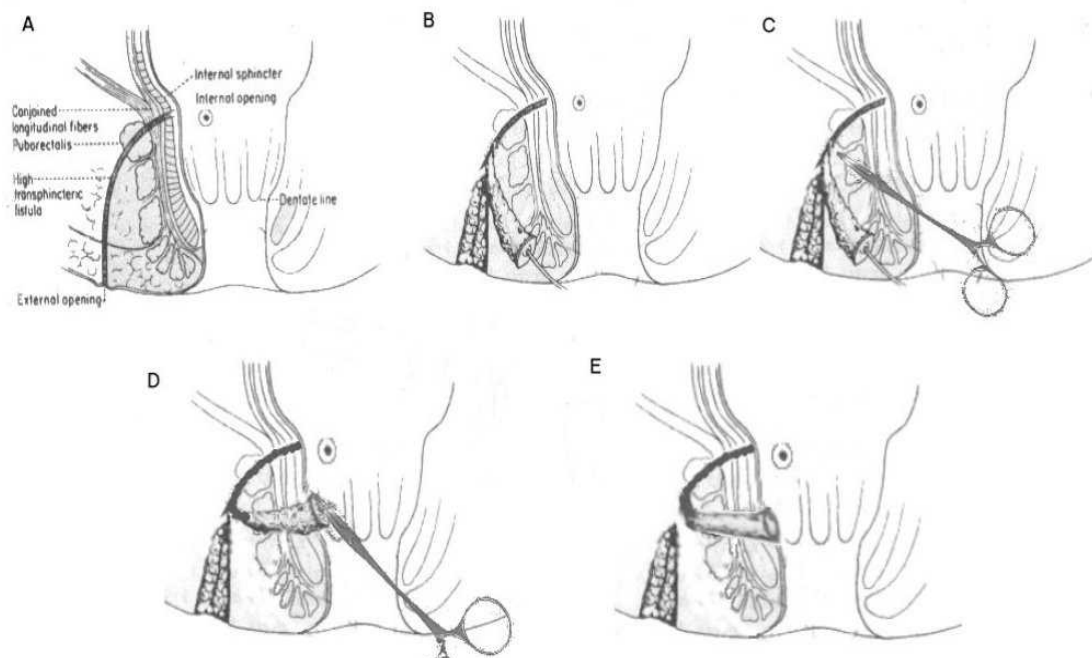


Fig.1: A- Fistulous track. B- Mobilization of fistulous track. C- Mosquito forceps passed through the wall of anal canal. D- Free end of the track is grasped and pulled into the anal canal. E- External opening is placed into the anal canal.

Postoperatively oral intake is restricted to clear liquids for 2 days, and the patients are given regular diet with oral laxatives on the third day. The dressing of the external wound is changed daily until healing by secondary intention is achieved.

Results

Table I showed that patients age was 28-48 years (average 35.2). Female to male ratio was 1:13. The site of the external opening of the fistula was mainly posterior (11 cases). Hospital stay was 1-4 days (average 2.35). The wound healing time was 2-6 weeks, an average of 2.8 weeks. Two patients (14.3%) needed prolonged healing time (5-6 weeks) due to neglected daily dressing. No patient had abscess formation, soiling, incontinence to flatus or faeces. During the follow up period (10-91) months, no patient had recurrence post - operatively. Two

patients had been lost the follow up.

Discussion

Most cases of anal fistula have a low track and relatively easy to treat by conventional laying - open techniques^{1,2,5,6}. Cases which have a high track causes problems for diagnosis and treatment. Careful probing intra-operatively should distinguish those cases that have a truly high internal opening from those which do not, and despite the fact that high anal fistula have been recognised and treated for many years, there is still consensus among colo-rectal surgeons as the optimum surgical approach^{2,5,6,8,15}.

In the staged procedure the seton is left in place for 6-8 weeks and sometimes for several months. However, results have not always been satisfactory; as pointed out by Park and Stitz, 22% of 106 patients thus treated had minor functional disturbances following high fistulotomies^{3,7}.

	Age	Sex	Site	Hospital Stay	Healing Time	Incontinence Flatus Faeces	Abscess Formation	Soiling	Follow up Period	Recurrence
1	40	Male	Post.	2/7	2/52	-	-	-	39/12	-
2	40	Male	Post.	4/7	2/52	-	-	-	12/12	-
3	38	Male	Ant.	1/7	3/52	-	-	-	23/12	-
4	30	Male	Post.	1/7	2/52	-	-	-	61/12	-
5	32	Female	Ant.	4/7	3/52	-	-	-	26/12	-
6	41	Male	Post.	3/7	2/52	-	-	-	91/12	-
7	32	Male	Post.	2/7	2/52	-	-	-	50/12	-
8	29	Male	Post.	2/7	3/52	-	-	Lost to follow up		-
9	28	Male	Post.	3/7	2/52	-	-	-	10/12	-
10	44	Male	Post.	2/7	*6/52	-	-	-	10/12	-
11	30	Male	Post.	2/7	3/52	-	-	-	12/12	-
12	29	Male	Post.	3/7	*5/52	-	-	-	34/12	-
13	32	Male	Ant.	2/7	2/52	-	-	Lost to follow up		-
14	48	Male	Post.	2/7	2/52	-	-	-	10/12	-

• Neglected daily dressing; needed further curettage.

Table I. Details of patients participating in this study.

Using transanal advancement mucosal flap for treatment of high anal fistula gives satisfactory results in preserving sphincteric muscle, lesser scar formation and avoids functional disturbance, but is rather tedious, time consuming and there is recurrence of 3.4% due to disrupted mucosal sutures^{3,4,15}.

In our study, even with the presence of two patients needing 5-6 weeks for healing of the wound, the average healing time was 2.8 weeks. Those two patients had neglected daily dressing, and needed only curettage one under

general anaesthesia and the other under sedation with daily dressing.

The long term effect on anal continence has been good regarding faeces and flatus. During follow up no recurrence or abscess formation were seen even in patients with history of previous fistula surgery, also the procedure is one stage operation with minimal operative time and short hospital stay.

In conclusion, re-routing of the fistula track is a satisfactory method in treating high anal fistula, conserving sphincteric function and achieving cure in a short time.

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