ORIGINAL ARTICLE

Better Option for the Patients of Low Fistula in Ano: Fistulectomy or Fistulotomy

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ABSTRACT

Aim: To determine which is a better option for patients of low fistula-in-ano: fistulectomy or fistulotomy.
Materials and methods: This prospective randomized controlled trial was carried out in general surgery department of Nawaz Sharif Social Security University Hospital Lahore from December 2010 to December 2011. All the patients were followed up for 10 months.
Results: A total 150 patients were included in this study which after randomization was divided into two groups, Group 1 included 75 patients who underwent fistulectomy and Group 2 also included 75 patients who underwent fistulotomy.
Conclusions: This study demonstrated fistulotomy resulted in lesser pain, bleeding, shorter wound healing time and shorter duration of postoperative wound discharge in comparison to a fistulectomy. The findings of our study need to be further evaluated with studies involving longer follow-ups.
Keywords: Fistulotomy, fistula in ano, fistulectomy

INTRODUCTION

A fistula in ano is a pathological condition in which a track, lined by granulation tissue connects the anal canal or rectum to the skin around the anus. The fistula in ano usually results by spontaneous rupture of an anorectal abscess or after inadequate surgery[1]. The other causes of fistula in ano are acute infection of the anal crypt leading to an anorectal abscess and then resulting in an anal fistula[2]. Fistula in ano are divided into two subtypes on the basis of their location i.e., if their internal opening lies below anorectal ring then they are known as Low fistula in ano and if they open above anorectal ring then they are called High fistula in ano. They usually present as watery, purulent discharge from external opening or pain. Low fistula in ano may occur in association with a number of other disease processes[3]. The main principle of management of low anal fistula is to treat the condition without hampering anal continence. Low fistula in ano can be treated in different ways which are fistulotomy or fistulectomy. In fistulotomy the fistulous tract is laid open, curetted and then allowed to heal by secondary intention. In fistulectomy the whole fistulous tract is excised (with diathermy or knife) but this method might result in anal sphincter impairment resulting into anal incontinence[2]**.** Low fistula in ano which are treated by fistulotomy shows good results[4]**.** The high anal fistulae are treated in different ways as by seton placement etc.

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MATERIALS & METHODS

This prospective randomized controlled trial was carried out in general surgery department of Nawaz Sharif Social Security University Hospital Lahore from December 2010 to December 2011. All the patients were followed up postoperatively for 10 months.

A total 150 patients were included in this study which after randomization (by lottery method) was divided into two groups, Group 1 included 75 patients which underwent fistulectomy and Group 2 also included 75 patients which underwent fistulotomy. All the patients above 18 years of age were included in the study. The patients who had perianal abscess, pilonidal sinus or other perianal pathologies and those associated with inflammatory bowel disease, tuberculosis were excluded. All the variables like postoperative pain, bleeding/discharge, anal incontinence, recurrence, average healing time and length of hospital stay were recorded. SPSS software version 17 was used for statistical analysis of data.

Postoperative Pain: This is defined as the pain felt by patients postoperatively at the site of operation, requiring Intramuscular/Intravenous analgesics. It is calculated in number of IV/IM analgesics required to make a patient comfortable.

Postoperative Bleeding: It is the bleeding which continues to come from site of operation even after 10 days postoperatively.

Anal incontinence: It is defined as the loss of voluntary control of anal sphincter by a patient postoperatively resulting from damage to sphincter after operation.

Length of hospital stay: It is defined as the total number of days patient stayed in hospital from day of operation to day of discharge.

Mean Healing time: It was the mean time taken by the patient's surgical site wound to heal by secondary intention. It was calculated in days.

RESULTS

A total 150 patients were included in this study which after randomization was divided into two groups, Group 1 included 75 patients which underwent fistulectomy and Group 2 also included 75 patients which underwent fistulotomy. The commonest presenting complaint of the patients of low fistula in ano was watery/purulent discharge from the external opening (78%) followed by perianal swelling (40%) and pain (38%). These presenting complaints are given in detail in table 1.

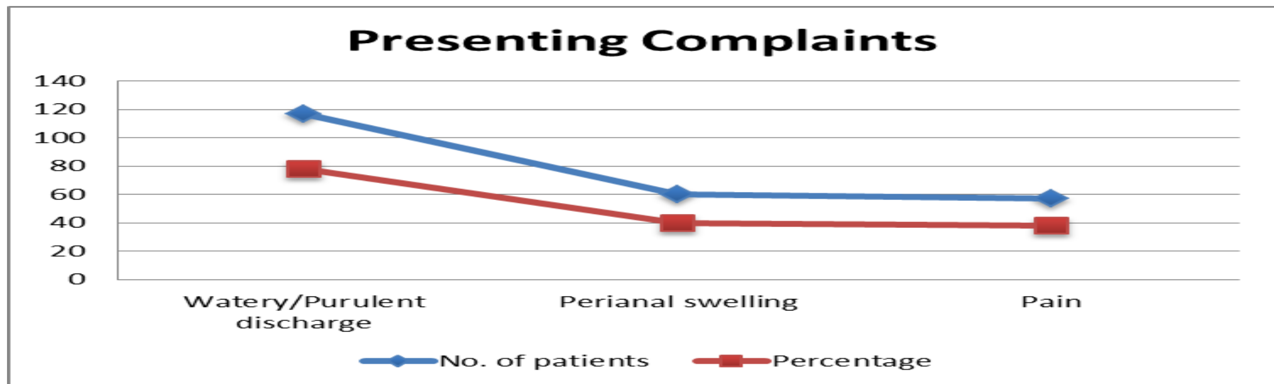
All the variables like postoperative pain, bleeding/discharge, anal incontinence, recurrence, average healing time and length of hospital stay were recorded. The results clearly show that fistulotomy is a better treatment option than fistulectomy because of shorter hospital stay, lesser postoperative pain and early healing. These variables are elaborated in table 2. There was no recurrence and anal incontinence recorded in both groups.

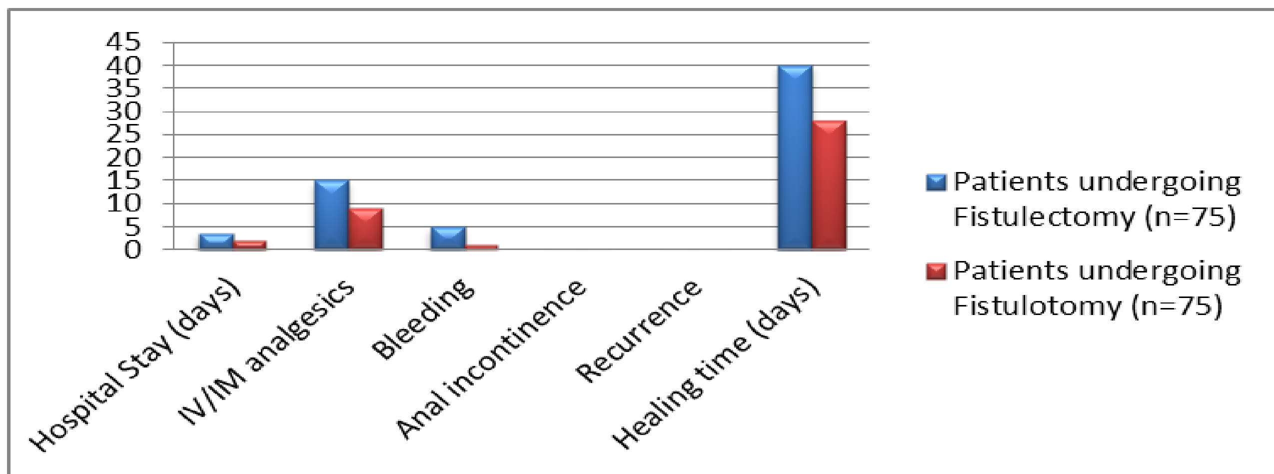
Table 1: Presenting Complaints of patients of Low fistula in ano

Presenting complaints	**=n**	**%age**
Watery/Purulent discharge	117	78
Perianal swelling	60	40
Pain	57	38

Table 2: Variables and their detail

Variables to be studied	**Patients undergoing Fistulectomy (n=75)**	**Patients undergoing Fistulotomy (n=75)**
Mean Length of hospital stay (days)	3.5	2.0
Postoperative Pain (mean no. of IV/IM analgesics)	15	9
Postoperative Bleeding	5	1
Anal incontinence	0	0
Recurrence	0	0
Mean healing time (days)	40	28





DISCUSSION

Fistulectomy requires dissection of the fistula tract from the surrounding tissues, followed by hemostasis whereas in a fistulotomy the fistulous tract is laid open without dissection of the fistula tract. Kronborg conducted a study to compare both treatment modalities i.e., fistulectomy and fistulotomy. His study showed development of anal incontinence in 3 out of 17 patients after the fistulectomy in comparison to 1 of 20 patients after the fistulotomy. This study included all patients with a single-tract anal fistula below the anorectal ring[5]. In the same study, Kronborg[5] showed a median healing time of 5.85 weeks in fistulectomy wounds whereas in fistulotomy wounds median healing time was 4.55 weeks for ($P<0.02$). In past years, many researchers have presented new surgical techniques and case series to reduce recurrence rates and anal incontinence following low fistula in ano surgery. The commonest presenting complaint of the patients in our study was mucopurulent/watery discharge. This is quite similar other studies also[4]. Certain studies have preferred fistulotomy over Fistulectomy (6, 7) because of shorter hospital stay and less postoperative bleeding after Fistulotomy. For high fistula in ano, the treatment is to place a seton or stage the procedure[8]. The low and simple fistulas in ano can be surgically managed by fistulotomy but appropriate assessment must be done to see the amount of external sphincter involvement[9,10]. In fistulectomy the whole track and adjacent tissue is removed resulting in larger wound followed by more risk of postoperative bleeding and pain with longer healing time[11]. In fistulotomy, lesser amount of tissue is excised resulting in earlier healing time as compared to fistulectomy[12]. Even in fistulectomy the tissue defect in anal sphincter was larger than in fistulotomy as was reported in a study in Mexico[13].

CONCLUSION

This study demonstrated fistulotomy resulted in lesser pain, bleeding, shorter wound healing time and shorter duration of postoperative wound discharge in comparison to a fistulectomy. The findings of our study need to be further evaluated with studies involving longer follow-ups.

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