Section: General Surgery

Original Research Article

CLINICAL STUDY OF VARIOUS MODALITIES OF TREATMENT FOR FISTULA IN ANO PATIENTS OF TELANGANA

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Abstract

Background: The fistula in ano is an abnormal communication between the anal and skin of the perineal region. Due to its position, various techniques have to be employed to eradicate the abscess. **Materials and Methods:** 55 (fifty-five) adult patients with fistulas in ano were studied. PR examination, Proctoscopy, and fistulogram were done for planned surgical treatment. All pre-operative routine blood examinations were carried out. Biopsy was done under appropriate anesthesia, and the dissected part was sent for histopathological examination. Based on the histopathological report, patients were treated post-operatively with fistulectomy surgeries and with broad-spectrum antibiotics post-surgically. **Result:** Clinical manifestations of fistula in ano patients had 52 (94.5%) had peroneal discharge, 42 (76.3%) had pain, 53 (96.3%) had swelling, 47 (85.4%) had only one opening, and 8 (14.5%) had more than one opening. The location was 8 (14.5%) anterior, and 47 (85.5%) posterior. The position was 46 (83.6%) had low, 9 (16.3%) were located in a high position. The surgeon informed that 39 (70.9%) had fistulectomy, 6 (10.9%) fistulotomy, seton thread, 53 (96.3%) had complete healing, and 2 (3.63%) had a recurrence of fistula. **Conclusion:** The fistulotomy technique is associated with a slightly high rate of recurrence but low chances of anal incontinence. It has a shorter operating time with less post-operative pain, and less time is needed for wound healing as compared to fistulectomy.

INTRODUCTION

The fistula in-ano is an abnormal communication, lined by granulation tissue between the anal canal and the skin, which causes a chronic inflammatory response.[1] Most commonly, they develop following anal abscesses. It is the most common cause of seropurulent discharge in the perianal region.[2]

If the outlet of the gland has been blacked secondary to fecal material, foreign bodies or trauma may result in stasis, infection, and an abscess, which can eventually point to the skin surface.[3] The tract formed by this process is the fistula. Abscess can recur if a fistula seals over, resulting in the accumulation of pus that may come to the surface and the process recurs again.

Surgery for fistulas in ano is considered essential for decompression of acute abscess and the present spread of infection. Fistula may be associated with diseases like inflammatory bowel disease, diverticulitis, tuberculosis, HIV infection, previous radiation exposure, or steroid therapy.[4] These patients may present with abdominal pain, weight loss, or a change in bowel habits. Hence, associated disease has to be ruled out before doing definitive treatment for fistula in ano. Hence, an attempt is made to use various modalities to treat fistula-in-ano and eradicate sepsis because there will be any recurrence.

MATERIALS AND METHODS

55 (fifty-five) adult patients aged between 20 to 60 years regularly visited the surgery department of the TRR Institute of Medical Sciences Patancheru Sangareddy (dist), Hyderabad, Telangana-502319 were studied.

Inclusive Criteria: Patients aged between 20-60 years with clinical diagnosis of fistula in ano presented to surgery OPD.

Exclusion Criteria: Patients with fissures in the ano, piles, malignancy, and patients who had undergone previous surgery were excluded from the study.

Method: Detailed histories of every patient, socio-economic status, and onset of symptoms were noted. Local examination per rectal examination; proctoscopy was done to assess the site of location (external or internal) and fistula. A fistulogram was done on every patient on the basis of the

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fistulography report, and surgical treatment was planned.

All routine pre-operative investigations were performed, and the fitness for the surgery was obtained from the Anaesthesia department. Every patient has been kept nil by mouth since the previous night of surgery. Operative parts were shaved and prepared prior to the surgery. Under appropriate anesthesia, surgery was done. The patients vere made to lie in the lithotomy position, cleaning and draping of the operative parts were done. The examination was done under anesthesia, and the site of opening (external or internal) was noted. Using the fistulotomy probe, the direction of the tract was delineated, whether curved or straight, and the and the level of the fistula in relation to the anorectal ring. The appropriate planned surgery was done. Specimens cut during surgery were sent to a histopathological study; patients were treated post-operatively as per the histopathological report.

The duration of the study was from May 2023 to April 2024.

Statistical analysis: The clinical manifestations of fistula locations, position, and type of surgery, as well as post-operative results, were classified by percentage. The statistical analysis was carried out in SPSS software. The ratio of males and females was 3:1.

Figure-1: Fistula in ano

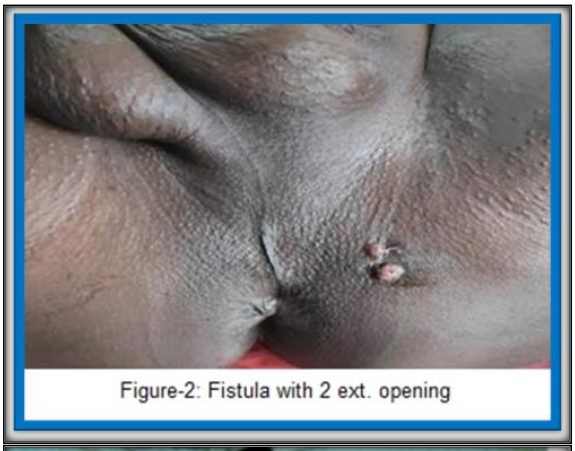


Figure-2: Fistula with 2 ext. opening

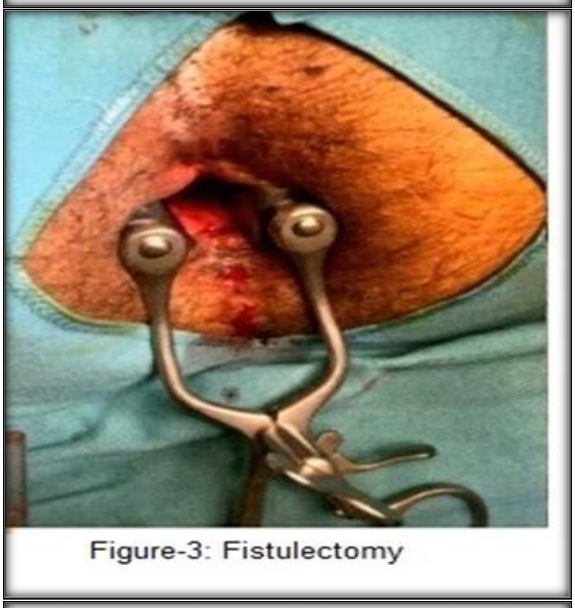


Figure-3: Fistulectomy

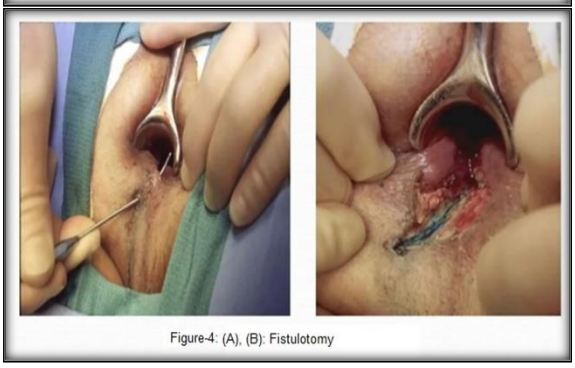
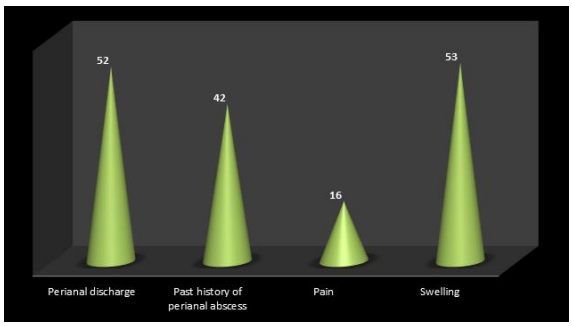


Figure-4: (A), (B): Fistulotomy

RESULTS



Graph 1: Clinical Manifestation of Fistula in ano patient

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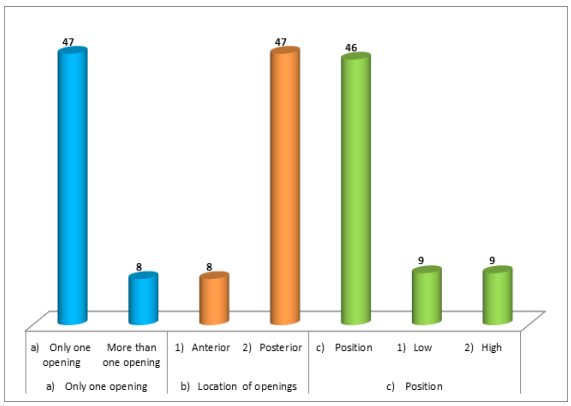
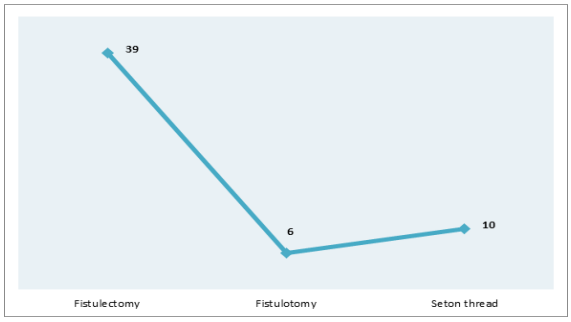


Graph 2: Distribution of opening locations and position



Graph 3: Study of types of surgery performed in fistula in ano patients

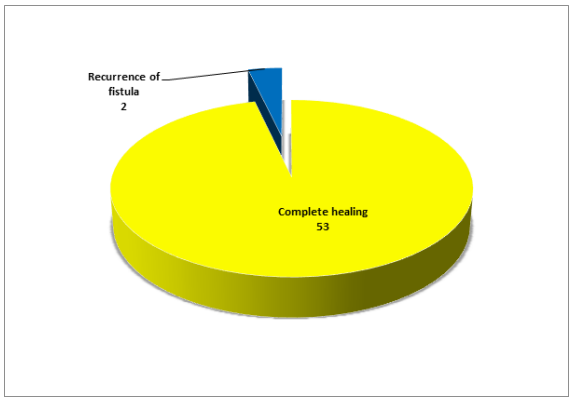
[Table 1] Clinical manifestations of fistula in ano patients 52 (94.5%) had perional discharge, 42 (76.3%) had past history of perianal abscess, 16 (29%) had pain, and 53 (96.3%) had swelling.

[Table 2] Distribution of openings, location, and position-

a. Opening: 47 (85.4%) had only one opening, 8 (14.5%) had more than one opening.
b. Location of openings: 8 (14.5%) had anterior, 47 (85.5%) had posterior.
c. Position: 46 (83.6%) had low, 9 (16.3%) had high.

[Table 3] Study of types of surgery performed in fistula in ano patients: 39 (70.9%) had fistulectomy, 6 (10.9%) had fistulotomy, and 10 (18.8%) had seton thread.

[Table 4] Study of post-operative results: 53 (96.3%) had complete healing, and 2 (3.63%) had a recurrence of fistula.



Graph 4: Study of post-operative results

Table 1: Clinical Manifestation of Fistula in ano patient.

Clinical Manifestation	No. of Patient (55)	Percentage (%)
Perianal discharge	52	94.5
Past history of perianal abscess	42	76.3
Pain	16	29
Swelling	53	96.3

Table 2: Distribution of opening locations and position

Opening	No. of openings	Percentage (%)
Only one opening	47	85.4
More than one opening	8	14.5
Location of openingsAnterior	8	14.5
Posterior	47	85.5
Position	46	83.6
Low	9	83.6
High	9	16.3

Table 3: Study of types of surgery performed in fistula in ano patients

Types of surgery	No. of patients (55)	Percentage (%)
Fistulectomy	39	70.9
Fistulotomy	6	10.9
Seton thread	10	18.8

Table 4: Study of post-operative results

Post-operative results	No. of patients (55)	Percentage (%)
Complete healing	53	96.3
Recurrence of fistula	2	3.63

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DISCUSSION

Present clinical study of various modalities of treatment for fistula in ano in patients of Telangana. In the clinical manifestations, it was observed that, 52 (94.5%) had perianal discharge, 42 (76.3%) had a past history, 16 (29%) had pain, and 53 (96.3%) had swelling [Table1]. In the study of the distribution of location, position, and opening: 47 (85.4%) had only one opening, 8 (14.5%) had more than one opening, 8 (14.5%) had an anterior fistula in ano, 47 (85.8%) patients had a posterior, 46 (83.6%) had a fistula located low, and 9 (16.3%) had high [Table2]. The various types of surgeries were 39 (70.9%) fistulectomy, 6 (10.9%) fistulectomy, and 10 (18.8%) seton thread [Table3]. 53 (96.3%) had complete healing, and 2 (3.63%) had a recurrence of a fistula [Table 4][Graph 1-4]. These findings are more or less in agreement with previous studies.[5-7]

The ultimate purpose of surgical treatment of an anal fistula is the eradication of sepsis and the maintenance of continence. To achieve these goals, it is essential to identify the internal opening and relationship between the fistular tract and the sphincter at the time of surgery. If the internal opening of the fistula is not identified or misdiagnosed, it leads to sphincter injury and the recurrence of the fistula. A simple way of differentiating a simple fistula from a complex fistula is through the palpation of the tract. If the tract is palpable from the external opening to the anal verge, it is regarded as a simple fistula. Fistula in ano seems to be affecting males predominantly, as evidenced by the present study population. Perianal discharge is the most common presenting symptom in fistulas in ano.[8] Although fistulotomy is preferable to fistulectomy because healing times are significantly shorter, fistulectomy is slightly more demanding, especially when the tract has ill-defined walls, because more damage is caused to the tissues surrounding the fistula tracts during fistulotomy.[9] The variations in the healing time might be due to the older age group, co-morbidity, and smoking habits.[10] In the high positioned anal fistula, the seton technique was performed as high fistula conventional laying open will lead to division of most of the anal sphincter muscles, resulting in incontinence; hence, the seton technique requires multiple settings of tightening of thread which is done in OPD itself. Seton technique treated patients were more comfortable than fistulectomy patients.[11,12]

CONCLUSION

In the present study, it was concluded that, fistulotomy could be used as the primary treatment for a low anal fistula because it is safe and simple to perform and has good patient satisfaction with regards to post-operative pain and outcome. A fistulotomy is performed owing to the shorter operative time, less time for wound healing, and shorter duration of hospital stay as compared to a fistulectomy. The seton technique is preferred only in high anal fistulas. Recurrence is related to diabetes mellitus, perianal collections, abscess along the tract, and multiple tracts under such a recurrence of fistula. Ligation of the inter-sphincteric fistula tract (LIFT) technique is used as an alternate treatment.

Limitation of study: Owing to the tertiary location of the research institute, small numbers of patients, and a lack of advanced techniques, we have limited research results.

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