Section: General Surgery

Original Research Article

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

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Abstract

Background: Fistula in ano is an abnormal communication between the anal canal and the skin of the perineal region. Due to its position, various techniques have to be employed for complete removal of the abscess and healing at the earliest. **Materials and Methods:** 92 (ninety-two) adult patients with fistulas in ano were studied. PR examination, photoscopy, and fistulogram were done for planned surgical treatment. All preoperative routine blood examinations were carried out. Surgery 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 87 (94.5%) with perineal discharge, 70 (76%) had past history of perianal discharge, 27 (29%) with pain, 89 (96.3%) with swelling, 79 (85.8%) with only one opening, and 13 (14.1%) with more than one opening. The location was 13 (14.1%) anterior and 79 (85.8%) posterior. The position was 77 (83%) had low, and 9 (16.3%) were located in a high position. The surgery performed was 65 (70.6%) had fistulectomy, 10 (10.9%) had fistulotomy, 17 (18.4%) had seton thread, 89 (96.1%) had complete healing, and 3 (3.21%) 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 postoperative pain, and less time is needed for wound healing as compared to fistulectomy.

INTRODUCTION

Fistula means a pipe or tube in Latin. It is a problem of any person on the globe. A fistula is an abnormal connection between the epithelized surface of the anal canal and usually the perianal skin. Fistula in ano has been a common surgical ailment reported since the age of Hippocrates,[1] but little systemic evidence is available in its management with advancement in modern medicine; management of fistula in ano has become feasible and easy. Fistula in ano is characterized on the basis of location relative to inter-sphincteric, trans-sphincteric, supra-sphincteric, or extra-sphincteric.[2] A fistula can be simple or complex submucosal low intersphincteric and low transsphincteric fistula, is considered a simple fistula in ano and is considered complex if the tract crosses more than 30-50% of the external sphincter, anterior fistula in ano in females, presence of multiple tracts, recurrent fistula, pre-existing incontinence, local irradiation, and Crohn's disease.[3]

Fistulotomy and fistulectomy are conventional operations of choice for patients having a fistula that is at a low level. The fistula tract is completely excised in fistulectomy. This reduces the risk of missing a secondary tract. It also provides tissue specimens for histopathological examination. Another surgery is fistulotomy, in which the surgeon opens the fistulous tract. This leaves a relatively small amount of wound. This leads to fast healing. Senton application causes simultaneous cutting and healing of the wounds and allows better drainage.

The impairment of incontinence has an effect on quality of life, so sphincter-sparing techniques are now popular.[4] Such fibrin or cyanoacrylate glue injection, anal fistula plus endorectal muscular or mucosal advancement flap core out fistulectomy ligation of intersphincteric fistula. Hence an attempt is made to rule out the types of fistulectomy or fistulotomy in different age groups and in both sexes.

MATERIALS AND METHODS

92 (ninety-two) adult patients aged between 20 to 60 years regularly visited the surgery department of

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Medinirai Medical College Hospital, Daltonganj, Palamu, Jharkhand-822101 were studied.

Inclusive Criteria

Patients aged between 20-60 years with clinical diagnosis of fistula in ano presented to surgery OPD and gave their consent in writing for the study and were selected.

Exclusion Criteria

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

Method: Detail histories of every patient, socio-economic status, and onset of symptoms were noted. Local examination per rectal examination; protoscopy 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 fistulography report, and surgical treatment was planned.

All routine preoperative investigations were performed, and the fitness of the surgery was obtained from the medicine 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 patient was made to resume the lithotomy position, and cleaning and draping of the operative posts 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 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-moderately as per the hostopathological report.

The duration of the study was from June 2022 to December 2024.

Figure-1: Fistula in ano

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.

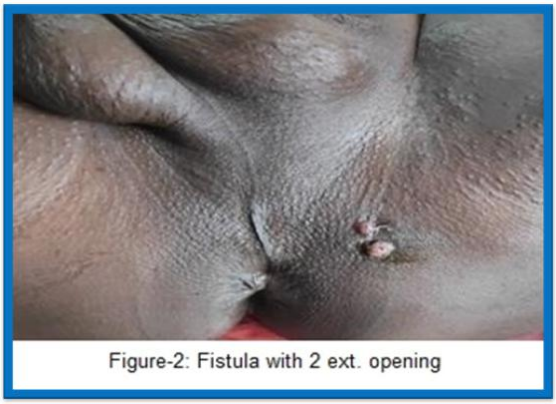

Figure-2: Fistula with 2 ext. opening

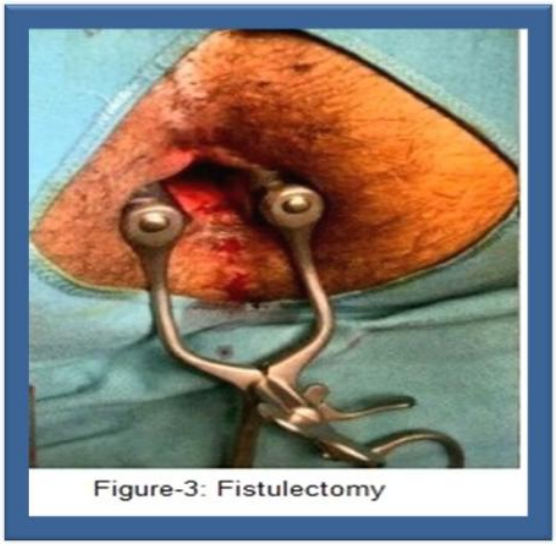

Figure-3: Fistulectomy

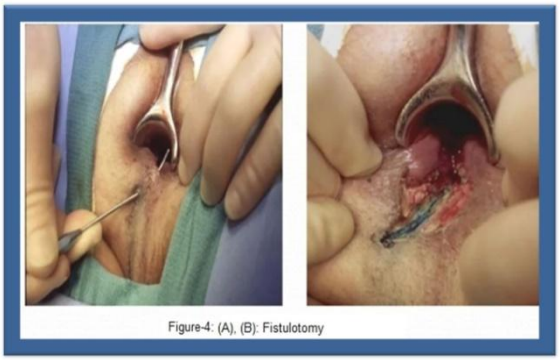

Figure-4: (A), (B): Fistulotomy

RESULTS

[Table 1] Clinical manifestations of fistula in ano patients—87 (94.5%) had perianal discharge, 70 (76%) had past history of perianal abscess, 27 (29%) had pain, and 89 (96.7%) had swelling.

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

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1. Opening: 79 (85.8%) had only one opening, and 13 (14.11%) had more than one opening.
2. Location of openings: 13 (14.5%) had anterior, 79 (85.8%) had posterior
3. Position: 77 (83%) had low, 15 (16.3%) had high.

[Table 3] Study of types of surgery performed in fistula in ano patients: 65 (70.6%) had fistulectomy, 10 (18.4%) had fistulotomy, and 17 (18.4%) had seton thread.

[Table 4] Study of post-operative results: 89 (96.7%) had complete healing, and 3 (3.2%) had a recurrence of fistula.

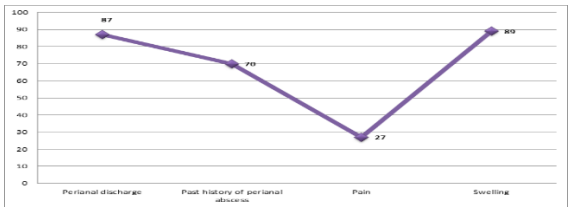

Chart 1: Clinical Manifestation of Fistula in ano patient

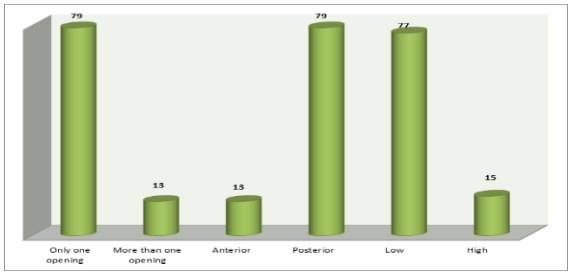

Chart 2: Distribution of opening locations and position

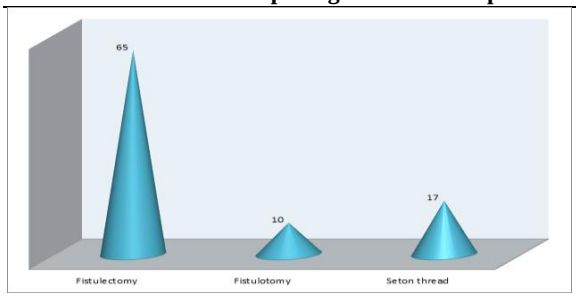

Chart 3: Study of types of surgery performed in fistula in ano patients

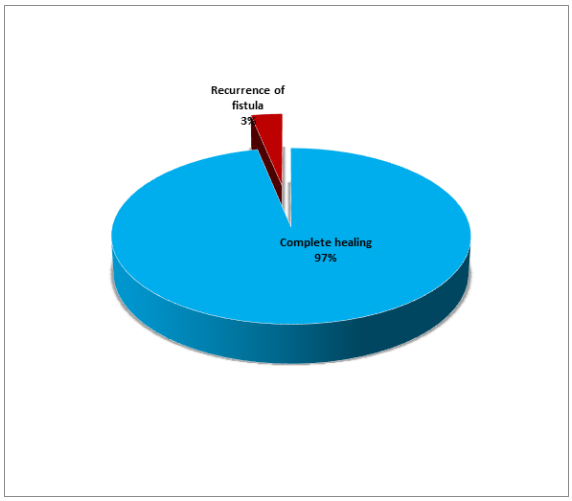

Chart 4: Study of post-operative results

Table 1: Clinical Manifestation of Fistula in ano patient.

Clinical Manifestation	No. of Patient (92)	Percentage (%)
Perianal discharge	87	94.5
Past history of perianal abscess	70	76
Pain	27	29
Swelling	89	96.7

Table 2: Distribution of opening locations and position

Opening	No. of openings	Percentage (%)
Only one opening	79	85.8
More than one opening	13	14.11
Location of openings		
Anterior	13	14.5
Posterior	79	85.8
Position		
Low	77	83
High	15	16.3

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

Types of surgery	No. of patients (92)	Percentage (%)
Fistulectomy	65	70.6
Fistulotomy	10	10.8
Seton thread	17	18.4

Table 4: Study of post-operative results

Post-operative results	No. of patients (92)	Percentage (%)
Complete healing	89	96.7
Recurrence of fistula	3	3.2

DISCUSSION

Present clinical study of various modalities of treatment for fistula in ano. The clinical manifestations were 87 (94.5%) had perianal discharge, 70 (76%) had a past history of perianal abscess, 27 (29%) had pain, and 89 (96.7%) had swelling (Table 1). In the study of the distribution of

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location and position, 79 (85.8%) had only one opening, 13 (14.1%) had more than one opening, 13 (14.1%) had an anterior, and 79 (85.8%) had a posterior; 77 (83%) had a low position, and 15 (16.3%) had a high position (Table 2). The types of surgeries were 65 (70.6%) fistulectomy, 10 (10.8%) fistulectomy, and 17 (18.4%) seton thread [Table 3]. The post-operation outcome was 89 (96.7%) had complete healing, and 3 (3.2%) had a recurrence of a fistula (Table 4) (Figure 1, 2, 3 and 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 7 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 those who underwent fistulectomy.[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 regard 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 intersphincteric 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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