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RESEARCH ARTICLE
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COMPARATIVE STUDY OF EFFECTIVENESS OF FISTULOTOMY & FISTULECTOMY FOR LOW ANAL FISTULA

Dr Ravi Goyal[1], Dr Vidhi Goyal[2], Dr Lokesh Singh[3], Dr Ashish Sharma[4*]

[1]Assistant professor, Dept of Surgery, PIMS, Udaipur, Rajasthan, India
[2]Assistant professor, Dept of OBG, PIMS, Udaipur, Rajasthan, India
[3]Resident, Dept of Surgery, PIMS, Udaipur, Rajasthan, India
[4*]Assistant Professor, Dept of Biochemistry, PIMS, Udaipur, Rajasthan, India

***Corresponding author:** Dr Ashish Sharma
*Assistant Professor, Dept of Biochemistry, PIMS, Udaipur, Rajasthan, India

Introduction

A fistula in ano is a track, lined by granulation tissue that connects deeply in the anal canal or rectum and superficially on the skin around the anus. It usually results from an anorectal abscess which bursts spontaneously or after inadequate surgery. Acute infection of the anal crypt leads to an anorectal abscess and an anal fistula represents the chronic form of this infection. (1)

Perianal fistulae connect the perianal skin or perineum to the anal canal. Perianal fistulae are associated with significant morbidity and discomfort for the patient. The majority of curable benign lesions of the rectum and anal canal are fistula in ano. Crypto glandular infections are to blame in 90% of instances. The majority of infections are acute and are brought on by ruptured or improperly drained anorectal abscesses that spread into the perianal skin. The chronic low-grade infections that contribute to the persistent majority suggest a variety of etiologies. With a thorough clinical examination and the different available investigation methods, the majority of them are simple to diagnose. Despite the simplicity of diagnosis, finding a cure is difficult because a high percentage of cases relapse or persist when the proper surgical technique is not used. Since there isn't a one effective strategy for treating fistula-in-ano, the surgeon must use his or her skill and discretion to determine the best course of action. The trade-off between the degree of sphincter division, postoperative healing rate, and functional loss must be considered by the surgeon. (2)

Materials and Methods

After receiving approval from the ethical committee, a comparative cross-sectional study was carried out in the Surgery department at the Pacific Institute of Medical Sciences, Umarda, Udaipur, among patients admitted during the period of March 2021 to Sepember 2022

- **Sample size –** The patients included in the study during the course of time from March 2021 to September 2022 at Department of Surgery, Pacific Institute of Medical Sciences, Umarda, Udaipur. Minimum sample size (n) required is 60.

The study included 70 patients with a clinical diagnosis of low fistula-in-ano who were admitted for surgery in the surgical wards. Most of the fistula are treated with by either fistulectomy or with fistulotomy.
The 70 patients were further divided into 35 each on the basis of their operative procedure that 35 were operated with Fistulectomy and 35 patients with Fistulotomy.

Inclusion Criteria-
The study included all adults with perianal fistula requiring surgical intervention.
The subjects giving consent were included.

Exclusion Criteria-
Patients who did not gave written consent.
Excluded rectal, intestinal and subcutaneous fistula as their pathogenesis is different.
The perianal secondary fistula were also excluded to avoid heterogenesity.

Data collection
A pre-tested structured questionnaire proforma was used to collect the data.
All respondents were directly interviewed for data after receiving their or their legal guardian's informed written consent.

Study Procedure
Non-random and purposeful sampling techniques were used in context of this research where each patient present in the surgery department that showcased anal fistula underwent a brief physical examination and history taking following admission smoking status about age, gender, previous recurrence, presence of inflammatory bowel disease, previous medical and surgical treatment and response, current fistula disease duration and presence of seton, presence of stoma and smoking status. Also completed baseline perineal disease activity Index (PDAI, Irvine 1995) and EQ-5D-5 L (Herdman etal 2011) Questionnaire with the participants.

Details history of the patient will be taken:
- **Specific history**

Systemic examination, with a focus on the abdomen. Special consideration was given to the palpatory finding of guarding during the abdominal examination.
- The preliminary diagnosis was intestinal blockage.

Investigations into the haematology Each was put through a set of blood tests.
- Leukocyte count overall (TLC) Between 4000 and 11,000 cumm were considered to be the range for a normal leukocyte count. Any amount greater than 11,000 cumm at admission was regarded as substantial.
- Reactive protein (CRP) It is a protein in the acute phase.

On admission, values of 10mg/l and higher were regarded as significant.

Detailed clinical examination was done with focus on:
- **Inspection-**.
- **Palpation-** Special consideration was given to the palpatory finding of guarding during the abdominal examination.
- **Investigation-**
  - Radiological:
  - Haematological: total leucocyte count, Differential leucocyte count
  - Biochemical: Lipid profile, thyroid profile, Liver function test and blood sugar.

Aims and objectives

AIM

To compare between effectiveness of fistulotomy and fistulectomy for low anal fistula.

OBJECTIVES:

1. To study the surgical outcome of fistulotomy for low anal fistula.
2. To study the surgical outcome of fistulectomy for low anal fistula.
3. To compare the efficacy of fistulotomy and fistulectomy and their surgical outcome in patients with low anal fistula.

Discussion

Since the follow-up time in this trial was just 8 months, it is unable to comment on the incidence of recurrence. Only one patient from the fistulotomy group (1/60) experienced recurrence during this research period. In 96 out of 115 patients who underwent fistulotomy for low anal fistulas, Some authors found 7 recurrences, 4 recurrences, 10 recurrences, 2 recurrence.[3,4,5,6]

Sejal V.B. (2020)'s purpose of this study was to compare surgical time, hospital stay length, wound healing time, and postoperative. Since the rate of recurrence was monitored for 6 months after the first diagnosis, little can be said about how the two techniques differ in terms of the criteria. [6] In contrast, there was only one case of recurrence in the fistulotomy group and none in the fistulectomy group in the current study. In 96 out of 115 patients who underwent fistulotomy for low anal fistulas, Shouler et al.[7] found recurrences (8%). Khubchandani et al.,[5] reported a recurrence rate of 5.8% (4/68 cases) in the fistulectomy group, Vasilevsky and Gordon et al.[6] reported a recurrence rate of 6.3% (10/160), and Kronberg et al.[4] reported a recurrence rate of 9% (2/21).

In Olfat. Al Sebai, et. al., (2021)[4] study, group B experienced considerably quicker wound healing (full epithelialization and absence of discharge), with a mean healing time of 4.07 weeks (28.49 days), compared to group A's mean healing time of 6.47 weeks (45.29 days). This contradicts the findings of Kronborg's study[8]. Additionally, this concurs with a study by Zuhair Bashir, (2012)[9] that involved 76 patients and found that the fistulotomy group's mean healing time was 26.38 days (range: 21-36 days) and was lower than the fistulectomy group's mean healing time of 38.64 days (range: 32-46 days). As stated by Nazeer and et. al., (2012)[10], in a study including 150 patients, the mean healing time for the fistulotomy group was 28 days, which was less time than the mean healing time for the fistulectomy group, which was 40 days.

Results

This comparative study was carried out at Department of Surgery, Pacific Institute of Medical Sciences, Udaipur. The Institutional ethical committee gave its approval for the current study. Fistula is predominantly present in the Udaipur region.

The study included 70 patients with a clinical diagnosis of low fistula-in-ano who were admitted for surgery in the surgical wards. Most of the fistula are treated with by either fistulectomy or with fistulotomy.

The 70 patients were further divided into 35 each on the basis of their operative procedure that 35 were operated with Fistulectomy and 35 patients with Fistulotomy.

The aim of this study was to examine the length of the hospital stay, the length of the recovery from surgery, and the postoperative

Both techniques are straightforward to do, have good success rates for healing, and will only split a small portion of the external anal sphincter. However, because to its quicker wound healing, reduced incontinence, shorter operating time, and equivalent recurrence rate, fistulotomy has a slight advantage over fistulectomy in the treatment of low anal fistulas.

Fistulotomy, which has a shorter operating time, less postoperative discomfort, and quicker wound healing times than fistulectomy while having a similar rate of postoperative complications, recurrence, and incontinence, can be successfully used to repair simple perianal fistulas.

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