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A Study on Anal Fistulas

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ABSTRACT

A perianal fistula (fistula-in-ano) refers to an abnormal connection between the anal canal and the perianal skin. The majority are associated with anorectal abscess formation, with one third of patients with an anorectal abscess having an associated perianal fistula at the time of presentation. The purpose of this study was to evaluate clinical features of fistula in group of patients and confirmed for surgery. Fifty patients (37 males and 13 females) of different age groups ranging from 10-60 years with clinically suspected anal fistula were imaged with transperineal sonography in males and transperineal and transvaginal sonography in females. All fluid collections, sinus tracts and fistulae were evaluated in relation to the sphincters and perineum. Different clinical features were identified among the patients under study and to evaluate the results after anal fistula surgery with closure of the external opening with regard to primary healing, sphincter function and continence. Thirty one patients with one external opening, five patients with two external openings and greater than two openings for four patients were seen on sonography and confirmed on surgery. The authors conclude that fistulectomy has been done for forty two patients and fistulotomy has been performed for eight patients.

INTRODUCTION

Anal fistulas are common anorectal conditions that can significantly impact a patient's quality of life. They are characterized by abnormal tunnels or tracts that form between the anal canal or rectum and the surrounding skin. The condition arises primarily due to infections in the anal glands, leading to abscess formation and subsequent rupture, which creates an abnormal passage. Anal fistulas can cause pain, discomfort, recurrent infections and even fecal incontinence if left untreated^[1-5].

Despite advances in medical knowledge and surgical techniques, anal fistulas remain a challenging clinical problem. Various factors, such as the location, complexity and patient-specific factors, contribute to the complexity of managing these fistulas effectively^[6-9]. In recent years, there has been significant research aimed at better understanding the etiology, classification, diagnostic approaches and treatment strategies for anal fistulas.

This comprehensive study aims to provide a detailed overview of anal fistulas, covering various aspects related to the condition^[4,10-14]. The study will delve into the following key areas:

- **Etiology and pathogenesis:** This section will explore the underlying causes of anal fistulas, with a particular focus on the role of anal gland infections, Crohn's disease, trauma and other predisposing factors. The pathogenesis of anal fistula formation will be examined to understand the disease's progression
- **Classification:** Anal fistulas present in various forms, making a standardized classification system crucial for effective management. This study will review the different classification schemes proposed in the literature, evaluating their utility in clinical practice
- **Clinical presentation:** Understanding the diverse clinical presentations of anal fistulas is essential for early recognition and accurate diagnosis. This section will highlight the various symptoms and signs associated with different types of anal fistulas
- **Diagnostic approaches:** Accurate diagnosis of anal fistulas is essential for determining the most appropriate treatment strategy. This study will discuss the different diagnostic modalities available, including physical examination, endoanal ultrasound, MRI and fistulography, comparing their benefits and limitations
- **Treatment strategies:** A significant portion of this study will be dedicated to reviewing the various treatment options available for anal fistulas. Conservative management, surgical techniques (e.g., fistulotomy, seton placement, fibrin glue,

advancement flaps) and emerging therapies will be thoroughly examined to provide a comprehensive overview of the current treatment landscape

- **Complications and outcomes:** Anal fistula treatments are not without risks and this section will analyze the potential complications associated with different interventions. Additionally, the study will explore the short-term and long-term outcomes of various treatment approaches

MATERIALS AND METHODS

Study design: Prospective study.

Study subjects: First 75 patients of consecutive sampling who met the inclusion and exclusion criteria were selected for the study.

Study setting: Study was conducted in the Department of General Surgery, Gandhi Medical College hospital, Hyderabad.

Study period: The study was conducted for a period of one year from the time of approval of IEC.

Inclusion criteria: All patients with a clinical diagnosis of fistula in ano presented to Gandhi Medical College and Hospital's General Surgery OPD.

Exclusion criteria: Severe comorbidities, fistulas owing to IBD, active TB, HIV, prior radiation therapy, malignancy, perianal trauma and patient refusal to undergo surgical surgery were all exclusion criteria.

Operative procedures: Fistulotomy, in which the entire fistula track is opened and fistulectomy, in which the entire fistula tract is removed, are two common surgical procedures.

Post-operative care: A sitz bath twice a day is recommended, along with daily dressing, to ensure that the wound heals from the inside out and without any pockets.

RESULTS AND DISCUSSIONS

In this study 50 cases who underwent fistula surgery were taken analysis of results according to age, sex, complaints, type of fistula, type of surgery and complications. In this study majority of patients were male (74%) and 26% are females (Table 1).

In this study 14% are in 51-60 yrs age group, 16% are in age group of 41-50 years, 23% are in 31-40 years and 12% are in 21-30 years (Table 2).

Based on the clinical features as tabulated below (Table 3) and number of external openings (Table 4) were treated with fistulectomy and fistulotomy as shown in Table 5.

Table 1: Gender wise distribution

Gender	No. of patients (%)
Male	37 (74%)
Female	13 (26%)

Table 2: Age wise distribution

Age groups	No. of patients (%)
10-20 years	0 (0%)
21-30 years	12 (24%)
31-40 years	23 (46%)
41-50 years	8 (16%)
51-60 years	7 (14%)

Table 3: Clinical features diagnosed for fistula in ano

Clinical feature	No. of patients (%)
Pain	33 (66%)
Swelling	21 (42%)
Peri anal discharge	38 (76%)
Peri anal irritation	6 (12%)
Peri anal abscess	40 (80%)

Table 4: No. of external openings

No. of openings	No. of patients (%)
1	41 (82%)
2	5 (10%)
>2	4 (8%)

Table 5: Surgery wise distribution

Surgery	No. of patients (%)
Fistulectomy	42 (84%)
Fistulotomy	8 (16%)

DISCUSSIONS

A fistula in ano is a granulation tissue-lined inappropriate route between the anal canal and the skin. The anal glands, which are located in the anal canal's subepithelial layer, are the main source of infection. In this study, 16% of patients were between the ages of 41 and 50, 46% were between the ages of 31 and 40 and 14% were over the age of 51. It was shown that the most common age group engaged is in their forties. In this study, 74% of the patients were men, whereas, 26% were women. Males are more prone to this condition. In this study, 76% of the patients had discharge in the perianal region. 40% of the patients had a history of a perianal abscess. About 12% of patients complained of perianal discomfort, 66% complained of pain and 42% complained of edoema. About 82% of patients presented with only one opening in the perianal region, 5.0% with two holes and 8% with more than two openings. The majority of the findings are consistent with western studies. Fistulectomy was performed on 84% individuals^[15-20]. Fistulotomy was performed on 16% of the patients.

CONCLUSION

By synthesizing current knowledge on anal fistulas, this study aims to contribute to a better understanding of the condition and provide valuable insights for healthcare professionals involved in managing patients with anal fistulas. Through an evidence-based approach, this research endeavors to improve treatment outcomes and enhance the quality of life for individuals suffering from this challenging anorectal condition.

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