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## **Clinical Study of Fistula in Ano**

Authors

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#### Abstract

Fistula in ano forms a good majority of treatable benign lesions of the rectum and anal canal. 90% or so of these cases are as a result of cryptoglandular infections. As such, the vast majority of these infections are acute and significant majority is contributed by chronic, low grade infections, hence pointing to varying aetiologies. The common pathogenesis however is the bursting of an acute or inadequately treated ano rectal abscess into the peri-anal skin. Most of these fistulae are easy to diagnose with a good source of light, a proctoscope, and a meticulous digital rectal examination despite the ease of diagnosis, establishing a cure is problematic on two accounts. Firstly, many patients tend to let their ailment nag them rather than being subject to examination, mostly owing to the site of affection of the disease. The more important second factor is that a significant percent of these diseases persist or recur when the right modality of the surgery is not adopted or when the post operative care is inadequate.

The need for this study is to evaluate the various approaches in surgical techniques as directed by the nature of the fistula and its etiology along with a combination of medical management as deemed appropriate and to hence have a comprehensive over view and understanding of this surgical condition.

- 1. To study the incidence of various aetiologies of fistulae occurring in the ano-rectal region.
- 2. To study the different modes of clinical presentation of these fistulae in ano.
- 3. To study the efficacy of different modalities of surgical approach with reference to persistence/recurrence of fistulae and sphincteric incontinence following surgery.

## Introduction

Fistula-in-ano forms good majority of treatable benign lesions of the rectum and anal canal. 90% or so of these cases are end results of crypto-glandular infections. It is not a life threatening disease but causes lot of inconvenience to lead a normal life. It is a

chronic disease which if not treated, forms abscesses and it may burst to produce serous or purulent discharge and troublesome pain. Though it is common disease, conservative management is not a permanent relief and hence surgery is curative.

The history given by the patient and careful

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general physical examination with a good source of light, a proctoscope and a meticulous digital rectal examination would be sufficient to diagnose. In some cases fistulogram and MRI are needed to diagnose the condition with associated conditions and etiological factors.

The majority of these infections are acute and significant minority is contributed by chronic, low grade infections, hence pain being to varying etiologies. The common pathogenesis however is the bursting open of an acute or inadequately treated ano-rectal abscess into the peri-anal skin.

Despite the easy diagnosis, establishing a cure is problematic on two accounts, firstly, many patients tend to let their ailment nag them rather than being subject to examination, mostly owning to the site of affection of the disease. The most important second factor is that a significant percent of these diseases persist or recur when the right modality of surgery is not adopted or when the post operative care is inadequate. So these conditions affect the young and middle aged persons causing loss of valuable productive man hours.

Since the day of disease, it was treated by surgery. With the recent clear awareness of the relations of the fistula with anal sphincters, the surgical treatment has become easier. For this reasons, one has to be grateful to the authorities of the anal surgery like parks, Milligan and Morgan.

Usually the fistula-in-ano excised and kept open to heal by granulation tissue. This procedure takes long period to heal completely.

In this work, one of the commonest disease is selected to study its evidence, etiology signs, symptoms, pathogenesis and management and follow up of the patient for a period of 6 months after surgery.

#### **Materials and Methodology**

This is a clinical study of fistula in ano done at MNR Medical College & Hospital, Sangareddy during the period of September 2015 to September 2017. 50 cases clinically diagnosed as fistula in ano were selected randomly using the closed envelope method and studied. Clinical history was obtained in all the patients. Clinical examination including per rectal and proctoscopy was done in required patients.

All the patients were processed by routine blood investigations, ECG, Chest X-Ray, urine for sugar, albumin, microscopy etc. prior to surgery. Fistulogram was done in selected cases. Patients were treated with fistulectomy or fistulotomy for fistulae. Patients were followed up for a period of 3 months to 1 year.

#### **Results**

50 cases of fistula in ano were selected randomly using closed envelope method and studied in detail, the following results were obtained

## Age incidence

| Age in years | No of patients | Percentage |
|--------------|----------------|------------|
| 20-30        | 15             | 30%        |
| 31-40        | 22             | 44%        |
| 41-50        | 10             | 20%        |
| >51          | 3              | 6%         |

## Sex incidents of fistula in ano

| Sex     | No of patients | Percentage |
|---------|----------------|------------|
| Males   | 38             | 76%        |
| Females | 12             | 24%        |

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## Socio economic status

| Socio-economic status      | No of patients | Percentage |
|----------------------------|----------------|------------|
| Low socio-economic class   | 35             | 70%        |
| Upper socio-economic class | 15             | 30%        |

## **Modes of presentation**

| Mode of presentation       | No of patients | Percentage |
|----------------------------|----------------|------------|
| Discharge                  | 15             | 70%        |
| Pain and swelling          | 10             | 20%        |
| Peri anal irritation       | 5              | 10%        |
| Past h/o peri anal abscess | 40             | 80%        |

## **Number of external openings**

| No. of external openings | No. of patients | Percentage |
|--------------------------|-----------------|------------|
| 1                        | 42              | 84%        |
| 2                        | 5               | 10%        |
| >2                       | 3               | 6%         |

## Situation of external openings

| Situation of external openings | No. of patients | Percentage |
|--------------------------------|-----------------|------------|
| Anterior                       | 8               | 16%        |
| Posterior                      | 42              | 84%        |

## Level of fistula

| Level of fistula       | No. of patients | Percentage |
|------------------------|-----------------|------------|
| Lower level of fistula | 44              | 88%        |
| High level of fistula  | 6               | 12%        |

## **Types of surgical treatment**

| Types of surgical treatment              | No. of patients | Percentage |
|--|-----------------|------------|
| Fistulectomy                             | 42              | 84%        |
| Fistulotomy                              | 5               | 10%        |
| Fistulectomy with lateral sphincterotomy | 3               | 6%         |

## Associated with Fissure in ano / Fistula

| Associated with Fissure in ano /<br>Fistula | No. of patients | Percentage |
|---|-----------------|------------|
| Associated with Fissure in ano / Fistula    | 3               | 6%         |

## Post operative complications and results

- 1. Complete healing 44 patients
- 2. Bleeding 2 patients
- 3. Recurrence of fistula 4 patients
- 4. Hematoma Nil

#### Follow up

In this study, series of patients were followed for a period of 3 months to 1 year, 4 patients had come with recurrence of fistula in their  $9^{th}$  and  $10^{th}$  month of follow up those who underwent fistulotomy with multiple openings. A low level fistula an average heals within 6 weeks whereas a high level fistula may take as long as 3-6 months to heal.

## **Etiology**

Specific - Nil

Non-specific - 50

#### Relation to Goodsaal's Law

In this study of 50 cases, studied followed Goodsaal's Law (external openings of all the anterior fistulae were within 3 cm of the anal verge

#### **Discussion**

- 1) Commonest age of presentation in our series is 30-40 years 44%.
- 2) Male: Female, 4:1.
- 3) More common in people with lower socio-economic status (70%), than high socio-economic class (30%).
- 4) Discharging pus is the commonest mode of presentation (70%) and pain in 20%. 80% have a past history of peri anal abscess.
- 5) Fistula with only one opening is the commonest mode of presentation i.e. 84%. 10% with 2 external openings and 6% with more than 2 openings.

- 6) Posteriorly situated external opening is commonest i.e. 80%, and anteriorly situated opening in 20%.
- 7) Low level fistula are more common, 6 patients had high level fistula i.e. 88% and 12% respectively
- 8) Majority of patients underwent fistulectomy i.e. 84%, 10% had fistulotomy and 6% fistulectomy with lateral sphincterotomy.
- 9) 4 patients had developed recurrence of fistula in their 8<sup>th</sup> and 10<sup>th</sup> month of follow- up. Fistulotomy with multiple external openings i.e. 8% and 92% complete healing.
- 10) None of the patients developed anal incontinence.
- 11) Etiology specific is nil and non-specific is 50 cases i.e. 0% and 100%.
- 12) Fistulectomy is better than fistulotomy, because of complete healing and no recurrence after surgery.
- 13) Surgery is the treatment for fistula in ano.
- 14) Relation to Goodsaal's Rule, external opening all the anterior fistulae were within 3cm of the anal verge.
- 15) Low level fistula on an average heals within 6 weeks. Whereas high level fistula may take as long as 3-6 months to heal.

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