Clinical Study of Fistula in ANO

Dr T. Srinivas.

¹Assistant Professor, Dept of General Surgery, Kakatiya Medical College, Warangal, Telangana. Corresponding Author: Dr T. Srinivas.

INTRODUCTION: Fistula-in-ano forms good majority of treatable benign lesions of the rectum and anal canal. 90% 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.

AIMS & OBJECTIVES OF THE STUDY: To study the incidence of various etiologies of fistulae occurring in the ano-rectal region. To study the different modes of clinical presentations of fistulae in ano.

MATERIALS AND METHODS: This is a clinical study of fistula in ano done at Mahatma Gandhi Memorial Hospital, Warangal between June 2014 to September-2015 admitted in the Department of General Surgery. clinically diagnosed, fistula in ano 50 cases were selected randomly using the closed envelope method and studied

RESULTS: In the present series of 50 cases, 44% of patients were in the age group of 31-40 years. Another 30% of patients were in the age group of 20-30 years. Mean age at presentation was 34.5 years. **CONCLUSION:** Fistula in ano is an important, commonest disease due to cryptoglandular infection (anal glands) and as a complication of ano rectal abscess.

KEY WORDS: Fistula-in-ano, Fistulectomy.

Date of Submission: 15-10-2019 Date of Acceptance: 31-10-2019

I. Introduction

Fistula-in-ano forms good majority of treatable benign lesions of the rectum and anal canal. 90% 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 and can only be dealt with surgery. Otherwise it forms abscesses causing troublesome pain. It may burst to discharge serous or purulent discharge which will come in the way of routine life and social mixing of the suffer with others. Though it is common disease in human beings, the conservative management is not a permanent relief in these cases.

The history given by the patient and careful general physical examination with a good source of light, a proctoscope and a meticulous digital rectal examination. In some cases fistulogram and chest x-ray 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 more easier. For this reasons, one has to be greatful 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 this 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.

II. Aims & Objectives of the Study

- 1. To study the incidence of various etiologies of fistulae occurring in the ano- rectal region.
- 2. To study the different modes of clinical presentations of 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.

III. Patients & Methods

This is a clinical study of fistula in ano done at Mahatma Gandhi Memorial Hospital, Warangal between June 2014 to September-2015 admitted in the Department of General Surgery.. clinically diagnosed, fistula in ano 50 cases were selected randomly using the closed envelope method and studied.

Clinical history was obtained in all the patients. Clinical examination including per rectal and proctoscopic was done in required patients. All the patients were processed by routine investigations, ECG, Chest, X-Ray, etc done prior to surgery. Fistulogram was done in selected cases.

Patients were treated with fistulectomy or fistulotomy for fistulae and followed up for a period of 3 months to 1 year.

INCLUSION CRITERIA:- 1) Fistula in ano presenting with persistent discharge causing pruritis and discomfort 2) patients above 18 years

EXCLUSION CRITERIA:-1) Patients who present with fistula in ano who are

Known cases of ulcerative colitis, crohn's disease, carcinoma of rectum, active abdominal tuberculosis, and radiation therapy

2) patients with perianal injuries.

IV. Observations & 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

Table-1

Age inyears	No ofpatients	Percentage
20-30	15	30%
31-40	22	44%
41-50	10	20%
>51	3	6%

In this present series, 44% of patients were in the age group of 31-40 years another 30% of patients were in the age group of 20-30, 20% of patients were in the age group 41-50 years, 6% of patients were in the age group of above

Sex incidents of fistula in ano:

Table-2

Sex	No ofpatients	Percentage
Males	38	76%
Females	12	24%

In this present series 76% of patients were males and another 24% of patients were females so the ratio is 4:1.

Socio-economic status.

Table-3

Socio-economic status	No ofpatients	Percentage
Lowsocio-economic class	35	70%
Upper socio-economicclass	15	30%

In the study, 70% of patients were belonging to lower socio-economic class and another 30% of patients were from higher socio-economic class. This disparity due to the fact that majority of the patients to attend the hospital are from a lower socio-economic class.

Modes of presentation.

Table-4

Mode of presentation	No ofpatients	Percentage
Discharge	15	70%
Pain and swelling	10	20%
Perianal irritation	5	10%
Past h/operianal abscess	40	80%

DOI: 10.9790/0853-1810131923 www.iosrjournals.org 20 | Page

In this series 70% of patients were, discharging wound was the presenting the complaint. 20% of patients with pain and swelling around the anal region, past history of peri anal abscess obtained from 80% of cases from this facts we note that discharging wound and pain, and past history of peri anal abscess are the commonest mode of presentation in the majority of patients.

Number of external openings.

Table-5

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

In the study of 50 cases were randomly selected patients of fistula in ano, 84% ofthem had only one external opening, while 10% had 2 external opening and another6% had more than 2 openings. Hence fistula in ano with a single external opening iscommonest in occurrence.

Situation of external openings.

Table-6

Situationofexternalopenings	No. ofpatients	Percentage
Anterior	8	16%
Posterior	42	84%

In this study 84% of patients are posterior opening and 16% of patients are anterior opening. So posterior situation was more common.

Level of fistula:-

Table-7

Level offistula	No. ofpatients	Percentage
Lower level of fistula	44	88%
High level of fistula	6	12%

In this study 88% of patients had low level fistula and another 12% of patients hadinternal opening situated above the ano rectal ring.

In the study of 50 cases were randomly selected patients of fistula in ano, 84% ofpatients underwent Fistulectomy, another 10% of patients Fistulotomy and another 6% of patients Fistulectomy with lateral sphinctorotomy.

In this study, 6% of patients presented with Fissure in ano with Fistula.

Post operative complications and results:-

- 1. Complete healing 44 patients
- 2. Bleeding 2 patients
- 3. Recurrence of fistula 4 patients
- 4. Haematoma 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 9th and 10th 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 fistulamay take as long as 3-6 months to heal.

Aetiology:-

Specific - Nil

Non-specific – 50

Relation to Goodsaal's Rule

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

V. Discussion

Age incidence

In the present series of 50 cases, 44% of patients were in the age group of 31 - 40 years. Another 30% of patients were in the age group of 20 - 30 years. Mean age at presentation was 34.5 years.

Sex incidence:-

In the study of 50 cases, 76% of patients were male and 24% were females so the sex ratio is 4:1.

Socio-economic status:-

In the study of 50 cases, 70% of patients were belonging to lower socio- economic status and 30% of patients were belonging to higher socio-economic status. This fact may be due to illiteracy, ignorance and poor hygiene.

Modes of presentation:-

In the study of 1 year duration, we could find that the commonest mode of presentation is discharging pus in 70% of cases. Pain was the associated symptoms in 20% of cases. Past history of peri anal abscess was the presenting complaint in 80% of patients. Swelling 20%, recurrent abscess was also the associated complaint in significant cases. Peri anal irritation was seen in 10% of cases.

Number of external openings:

In present study, 84% of patients had only one external openings, 10% of patients had 2 external openings, another 6% of patients had more than 2 external openings. From this fact we can conclude that fistula in ano present in majority of cases, with only external openings.

Situation of external opening:

In this present series of 50 cases, who were randomly selected 84% of patients had external openings situated posterior to the anal openings. Another 16% of patients had an external openings situated anteriorly.

Level of fistulae:

In this study, 88% of patients had low level of fistula and another 12% of patients had an internal opening situated above ano rectal ring. In this study, 88% of patients underwent fistulectomy and another 10% of patients underwent fistulotomy, 6% of fistulectomy with lateral sphincterotomy.

Post operative complications and results:

Follow up:

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

In this study, series patients were followed for a period of 3 months to one year. 4 patients had come with recurrence of fistula in their 8th and 10th month of follow up. Otherwise 90% had responded with complete healing. Recurrence for those who went fistulotomy with multiple external opening. Low level fistula on an average heals within 6 weeks. Whereas high level fistula may take as long as 3-6 months to heal.

Aetiology:

Specific -Nil Non-specific - 50

Relation to Goodsaal's Rule:

In this study, of the 50 cases, study followed Goodsaal's Rule (external opening of all the anterior fistulae were within 3cm of the anal verge).

VI. Conclusion

Fistula in ano is an important, commonest disease due to cryptoglandular infection (anal glands) and as a complication of ano rectal abscess.

It is curable disease by the treatment of surgery and higher antibiotics, local antibiotics with good post operative wound management, like sitz bath for twice a day without closing the wound.

Diagnosis is by history, clinical examination, per rectal examination with discharging pus and pain, histopathological examination of fistula tract gives the non-specific aetiology of all the study 50 cases, specific aetiology is nil.

All the cases should undergo surgery, fistulectomy is better than fistulotomy because of complete healing and no recurrence after surgery.

VII. Summary

- [1]. Commonest age of presentation in our series is 30-40 years 44%.
- [2]. Males are more commonly affected. Ratio Male: Female, 4:1.
- [3]. Disease is more commonly seen in people with lower socio-economic status group 70%, high socio-economic class 30%.
- [4]. Discharging pus is the commonest mode of presentation 70% and pain 20% and 80% past history of peri anal abscess was the presenting symptom.
- [5]. Fistula with only one opening is the commonest mode of presentation i.e.84%, 10%, 2 external openings, 6% more than 2 openings.
- [6]. Posteriorly situated external opening is commonest i.e. 80%, anteriorly situated opening 20%.
- [7]. Low level fistula are more common, 6 patients had high level fistula i.e. 88% and 12%.
- [8]. Majority of patients underwent fistulectomy i.e. 84%, 10% fistulectomy, 6% fistulectomy with lateral sphincterotomy.
- [9]. 4 patients had developed recurrence of fistula in their 8th and 10th 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]. Aetiology 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.

Dr T. Srinivas. "Clinical Study of Fistula in ANO." IOSR Journal of Dental and Medical Sciences (IOSR-JDMS), vol. 18, no. 10, 2019, pp 19-23.