# Study On the Response of Patients to the Various Treatment Modalities for Fistula-In-ANO.

# Dr. Swetha Pinjarala Dr. K. Venkateshwarlu M.S

Post Graduate in Department of General Surgery, GGH, Vijayawada, A.P. India Assistant Professor, Department of General Surgery, GGH, Vijayawada, A.P, India

#### ABSTRACT:

BACKGROUND: Anal fistula is known for its complicated pathogenesis and has been a clinical challenge for years. Being one of the most common anorectal diseases, the prevalence is greater in men than women, with a rate of 12.3 cases per 100,000 and 5.6 cases per 100,000, respectively. The average age at diagnosis is 38 years, with most occurring between 20 to 40 years of age. In spite of being a benign treatable condition, the risk of recurrence and The risk of frequent recurrence and incontinence poses to be a considerable threat in the long-term treatment of anal fistula. An attempt is made in this study to compare various treatment modalities in the management of fistula-in-ano and its outcome.

MATERIALS AND METHODS: It is a prospective observational study where the patients between the age groups of 18-30 years diagnosed with fistula-in-ano, a total of 50 patients admitted in the department of general surgery between the duration of Jan 2021 to June 2021 were included in this clinical study selected on the basis of simple random sampling technique. Patients were treated with Seton repair, fistulotomy, and fistulectomy. Follow-up was taken up for a duration of 4months to 12months.

**RESULTS:** Results of the above study showed a significant difference in the degree of occurrence of short term complications and long term complications between the procedures such as seton repair, fistulotomy, and fistulectomy with significantly lower recurrence rates in fistulotomy and fistulectomy with increased rates of pain and incontinence

**CONCLUSION:** fistulotomy and fistulectomy procedures were observed to offer patients compliance with the disease cure in comparison with the seton repair procedure.

Date of Submission: 08-12-2021 Date of Acceptance: 23-12-2021

I.

## **Introduction:**

Drainage of anorectal abscess results in a cure for about 50% of patients. The remaining 50% of patients develop a persistent fistula-in-ano. The fistula originates in the infected crypto-glandular infection which is the source of internal opening and tracks to the external opening, usually the site of earlier drainage or ulceration. The course of the fistulous tract is predictable by the anatomy of the previous abscess. The abovesaid condition is notorious for its frequent recurrences, exacerbations, and chronicity. An anorectal abscess is an acute inflammatory condition that often happens to be the initial manifestation of the underlying fistula-in-ano which turns into a chronic condition as a consequence of the inadequate drainage of the abscess. The vast majority of these infections are acute, although a significant portion is contributed by the inadequately treated anorectal abscess. Conditions such as malignancy, Crohn's disease, radiation, chlamydia, tuberculosis, and actinomycosis, may also lead to fistula. A complicated, non-healing fistula complex must raise suspicion of one of these etiologies. Diagnosis can be easily made with the help of a simple per rectal digital examination and a proctoscope in a well-lit room. Patients often present with complaints of persistent drainage from both internal and external opening or either alone. An indurated tract is easily palpable on DRE. Although external opening can be readily identified, the location of internal opening often warrants the use of additional techniques for identification therefore, might pose a challenge. An anal fistula can be divided into simple and complex types depending upon the degree of the lesion. Simple fistulae consist of low transphicteric and inter sphincteric types totaling to 30% of the sphincter complex. Whereas, the complex group consists of transphicteric types associated with malignancy, inflammatory bowel disease, radiation, chronic diarrhea. Or persistent fecal incontinence accounting for more than 30% of cases.

To achieve a Cure for this benign condition is majorly a challenge due to the following reasons, 1. The site of infection makes the patient reluctant to subject themselves to the examination. 2. Major portion of the cases taken up for management often end up with persistent disease and recurrence due to appropriate surgery, not being done, or when post-op care is insufficient. 3. Diverse causes. The above-mentioned study is advocated so as to study the outcome of patient response and outcome to the various surgical modalities, directed by the

DOI: 10.9790/0853-2012084244 42 | Page www.iosrjournal.org

nature of fistula and its etiology and pathological process, thence to have a comprehensive understanding of this surgical condition.

#### The objective of the study:

To study the response in patients to various treatment modalities for fistula-in-ano, with cutting seton repair, fistulotomy, and fistulectomy.

#### II. Materials and methods:

The prospective randomized controlled study was carried out on the patients from the department of general surgery at Government General Hospital, Vijayawada, ap. From the duration of January 2020 to June 2021. A total of 50 patient's adult subjects of age >18yrs including both males and females were included in the study.

Study design: A prospective open-label observational study.

Study location: Department of general surgery, Government general hospital, Vijayawada, AP

Study duration: 18months dating from January 2020 to June 2021.

Sample size: 50 patients

**Subjects and selection method**: patients presenting to the surgical OPD in the above said duration diagnosed with fistula-in-ano were taken up for the study, based upon history, clinical investigations, and occasionally, radiological investigations.

#### **Inclusion criteria**:

Cases presenting with simple low anal fistulae Age group 18-60years

#### **Exclusion criteria:**

Patients below 18yrs of age

Patients with an acute comorbid condition

Complex fistula-in-ano with multiple internal opening

Very high anal fistula

A fistula from radiation exposure

Fistula is a complication of extrapulmonary tuberculosis

Fistula as a complication of inflammatory bowel diseases such as Crohn's and ulcerative colitis

Fistula as a complication of anorectal malignancy

#### **Procedure and Methodology:**

Patients who met inclusion and exclusion criteria for the study were selected and all patients discussed the nature of the disease and possible complications (recurrence, anal incontinence, and anal stricture) expected after surgery was explained. Written and informed consent for the study and surgery was obtained.

In proforma, thorough history, symptomatology, and clinical examination, we identified internal opening and external opening by thorough digital rectal examination and proctoscopic examination under adequate illumination.

With a simple random sampling method, patients were selected for 1. Seton repair 2. Fistulotomy 3. Fistulectomy. 17 patients were taken up for seton repair, 16 for fistulotomy, and 17 for fistulectomy procedures. Patients were shifted to ward and adequate analgesics and antibiotics were administered. Liquid diet was initiated after 8 hours of surgery. The anal pack was removed on 1st postoperative day. Normal diet was started from 1st post-operative day. If patients improved clinically, they were discharged and advised to follow up at surgical OPD. Patients were assessed with postop complications, such as 1. Postoperative bleeding 2. Postoperative pain 3. Wound infection & fever 4. Short-term anal incontinence followed by complications on follow-up such as long-term anal incontinence, recurrence, and anal stricture.

#### III. Observation And Results:

The inference of the above-conducted study was calculated in terms of immediate post-op complications and long-term procedural complications.

#### 1. Short term postoperative complications and patient response:

POSTOP COMPLICATIONS:	BLEEDING	PAIN	SHORT TERM INCONTINENCE	FEVER AND WOUND INFECTION
SETON REPAIR (17)	2 11.7%	4 23.5%	2 11.7%	2 11.7%
FISTULOTOMY(16)	3 18.75%	6 37.5%	4 25%	2 12.5%
FISTULECTOMY(17)	4 23.5%	6 35.29%	5 29.4%	3 17.6%

#### 2. Long term procedural complications and patient response:

COMPLICATIONS ON FOLLOW UP	PAIN	INCONTINENCE	STRICTURE	RECURRENCE
SETON REPAIR(17)	4 23.5%	2 11.7%	0 0%	9 52.9%
FISTULOTOMY(16)	6 37.7%	4 25%	2 12.5%	5 12.6%
FISTULECTOMY(17)	6 35.29%	7 41.1%	3 17.6%	2 11.6%

### IV. DISCUSSION:

On the basis of the above-mentioned observation it was noted that the short post-op complication such as bleeding, wound infection, pain, and incontinence were significantly low in patients who underwent seton repair probably due to the minimally invasive nature of the procedure. Whereas patients which were undertaken for the fistulotomy were observed to have a significantly high proportion of pain and incontinence and a moderate proportion of bleeding and wound infections. Patients with fistulectomy as their treatment modality were noted to have a high proportion of bleeding, pain, and incontinence and moderate amounts of wound infection.

Patients were followed up with long-term response and complications, on which they were further observed to that subjects undergoing seton repair, showed an increased tendency for recurrence, whereas subjects undergoing fistulotomy were observed to suffer from a moderate incidence of pain and incontinence. Patients with fistulectomy were observed to have significantly high rates of incontinence and pain with decreased rates of recurrence.

#### V. CONCLUSION:

On the basis of the above study it is noted that minimally invasive procedures such as seton repair though offer lesser rates of short term complications, yet showed a high degree of recurrence and long term pain. Whereas patients undergoing fistulotomy have moderate post-op complications with fewer chances for anal incontinence and stricture with moderate recurrence rates and patients undergoing fistulectomy were observed to have moderate degrees of post-op complications and a moderate degree of stricture and incontinence rates and low recurrence rates.

Therefore, we conclude that fistulotomy and fistulectomy are acceptable procedures for low lying simple fistula-in-ano. when compared with the cutting seton repair.

#### **BIBLIOGRAPHY:**

- Jenifer K Lowney & James W Fleshman Jr, Beningn disorders of Anorectum, Maingot's Abdominal Operations, 11th edition 2007, 684.
- [2]. Heidi Nelson, Anus, Sabiston Textbook of Surgery, 19th edition, 2012,1394-1396.
- [3]. Kelli M Bullard Dunn & david A Rothenberger, Colon rectum & Anus, Schwartz's Principles of Surgery, 9th edition 2010, 1064-65.
- [4]. Zuhair Bashir Kamal, Fistulotomy versus Fistulectomy as a primary treatment of Low Fistula In Ano, The Iraqi Post Graduate Medical Journal, Vol.11, No.4, 2012.
- [5]. Osama Turki Abu Salem, Fistulectomy and Fistulotomy for Low Anal Fistula, Rawal Medical Journal, Vol.37, No.4, October-December 2012.
- [6]. Ahmed.M.A. Ali Gaffar, Fistulotomy versus fistulectomy as a treatment for low anal fistula in Infants: A comparative study, Annals of Pediatric Surgery, 2013, 9:103-107.
- [7]. Amin SN, et al, V-Y advancement flap for treatment of fistula-in-ano Dis Colon Rectum. 2003 Apr; 46(4):540-3.
- [8]. Sharma D et al, Scholars Journal of Applied Medical Sciences, 2014; 2(1B): 201-204
- [9]. Jacob TJ, Perakath B, Keighley MR.B. Surgical intervention for anorectal fistula. Cochrane Database of Systematic Reviews 2010, Issue 5. Art. No.: CD006319.
- [10]. Gupta PJ. Radiofrequency fistulotomy in anal fistulaMedicina (Kaunas) 2003; 39: 996-998
- [11]. Barker PG, Lunniss PJ, Armstrong P, Reznek RH, Cottam K, Phillips RK. Magnetic resonance imaging of fistula-inano: technique, interpretation and accuracy. Dis. Colon Rectum 1994; 37: 288.

Dr. Swetha Pinjarala, et. al. "Study On the Response of Patients to the Various Treatment Modalities for Fistula-In-ANO." *IOSR Journal of Dental and Medical Sciences (IOSR-JDMS)*, 20(12), 2021, pp. 42-44.

\_\_\_\_\_