The Incidence of Low Fistula in Ano and Results of Fistulectomy

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Abstract:

Background: Fistula in the ano is one of the most common coloproctological conditions. This research aims to determine the prevalence of ano fistula in the rural population, as well as the outcomes of fistulotomy surgery.

Methodology: From January 1 to December 31, 2020, this study was conducted in Jharkhand. During the study duration, 72 patients with Low fistula in Ano were included. Fistulotomy surgery was performed on all 72 patients. The aim of this study was to determine the prevalence of low-level fistula in rural populations, as well as the male-female ratio, as well as the outcome of one surgical procedure, fistulotomy, in terms of postoperative pain, wound healing time, infection, incontinence, and recurrence.

Results: In rural areas, the incidence of ano fistula was estimated to be around 8.6 per 1 lakh people, with a male to female ratio of 11.8:1. Patients ranged in age from 22 to 55 years old, with the average age being about 38 years. Post-operative pain lasted 2.9 ± 2 days, with wound healing taking 28.5 ± 7 days. There was no anal incontinence in any of the 72 patients, and only three of them $(4.17\ \%)$ had recurrence.

Conclusion: In rural Papulation of Jharkhand, the incidence of low fistula in ano is about 8.6 per 100000, with a male to female ratio of 11.8:1. In our research, fistulotomy is one of the best surgical procedures.

Keywords: Fistulotomy, Low anal fistula.

Introduction:

Anal Fistula is a surgical syndrome characterized by unusual communication between the anorectum and the perianal tissue. It normally starts as an abscess in the anorectum. Anorectal abscess and anal fistula arise from the anal crypto glandular area, resulting in anorectal abscess and the development of a fistula in the anorectal region. Recurrent pain and serous or purelent discharge to sever sepsis are the most common symptoms that impair one's quality of life. Below the anorectal band, along the dentate axis, a low level fistula opens into the anal canal. Fistula in ano can be treated with a variety of surgical procedures. Because of its excellent results, we chose fistulotomy for treatment of fistula in ano in our research.

Methodology:

From January 1 to December 31, 2020, this study was conducted in Jharkhand. During the study duration, 72 patients with Low fistula in Ano were included. Fistulotomy surgery was performed on all 72 patients. Our study included all low anal fistulas of any age or gender; only high fistulas, inflammatory bowel disease, malignancy, irradiated, or critically ill patients were removed. Before the examination, both patients gave their written consent. All patients were informed about the steps involved in operative interferences. In terms of healing time, complication, post-operative pain, recurrence, and result, the technique was assessed.

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Results:

The most common age group affected by fistula in ano was found to be 22 to 55 years old over a one-year period. The youngest patient was 22 years old, and the oldest patient was 55 years old.

Table 1: Showing Age Incidence

Age group (in years)	No. of cases	Percentage
22 - 32	16	22.22
32 - 42	38	52.78
42 – 55	18	25.00
Total	72	100

Table 2: Post-operative pain duration

Minimum duration of pain (days)	Maximum duration of pain (days)	Mean duration of pain (days)
2	7	2.9±2

Table 3: Post-operative wound Infection in patients

Infection in patient	Total patient	Percentage
7	72	9.7%

Table 4: Post-operative healing time of wound

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Total patients	Minimum healing time (days)	Maximum healing time	Mean healing time (days)
		(days)	
72	22	43	28±7

Table 5: Post-operative anal incontinence among various groups

Incontinence in patients	Total patients	Percentage
0	72	0%

Table 6: Post-operative recurrence in various groups

Reoccurrence in patients	Total patients	Percentage
3	72	4.17%

Duration to return normal routine life after surgery

Average time required is 4.55 days ranged from 3 to 10 days.

Table 7: Return to routine work after surgery

Total p	atients	Minimum	Maximum	Mean (days)
		duration (days)	duration (days)	
7	2	3	10	4.55

Discussion:

The most common age group affected by ano fistula was found to be 32 to 42 years old in our research, which matches the findings of most other studies. The average age in our sample was 38.5±5 years. After a survey of 5325 cases, Buie (1960) claims that the average age for Fistula-inano is 42 years. Fifty percent of the cases were between the ages of 30 and 50. The disease was more common in males in our sample, which included 85 males and 7 females. The ratio of males to females is 11.8:1. Males account for 88 % of our sample, which matches the findings of most studies. Gabriels (1937) found a 3:1 ratio of males to females in cases of fistula-inano. Lockhart Mummery aligned with this claim in 1957. Males account for 68.8% of fistula-in-ano cases,

according to Buie (in 1960). Males made up 91 percent of the patients studied by Khurana et al (1972). Fistulotomy had a slightly shorter post-operative pain cycle in our research, with a mean duration of 2.9±2 days for fistulotomy. There were three levels of pain: mild, moderate, and extreme. About 70% of fistulotomy patients experienced mild pain, while 30% experienced moderate pain.

After fistulotomy, all of the patients reacted to a simple analgesic like diclofenac sodium, which was only required for a week on average. Wound infection was found to be substantially shorter in length after fistulotomy in our research. Wound infection is the most common complication after surgery, but it is very rare after fistulotomy, occurring in just 9.7% percent of cases. The average time it takes for a wound to heal in fistulotomy patients is 28 days, with a mean of 28±7 days. For fistulotomy patients, Kronborg shows a shorter recovery period (34 days vs. 41 days). After a fistulotomy, no patient experiences anal incontinence. Many of those patients were closely monitored. During the follow-up phase, no patients were found to have anal incontinence. This is rational, given that all of our patients' internal openings were in the lower anal canal. Other randomized clinical trials (Lindsey et al., 2002; Jain et al., 2012, Raslan, 2018) have found similar results. After fistulotomy, recurrence is the least common, occurring in just 4.17 % of patients similarly, Litta et al., 2019 found 93% success rate. Recurrences occurred in three patients after 1-6 months. Another research on Forty patients with simple anal fistulas was performed in North India found no cases of recurrence or anal incontinence. (Jain and colleagues).

Conclusion:

In rural Papulation of Jharkhand, the incidence of low fistula in ano is about 8.6 per 100000, with a male: female ratio of 11.8:1. In our research, fistulotomy is one of the best surgical procedures. Early wound healing, lower rates of wound infection, less post-operative pain, early hospital discharge, and a lower incidence of recurrence make fistulotomy a common surgical procedure for the treatment of low anal fistulas.

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