Incidence of Low Fistula in Ano and Results of Fistulotomy in Rural Tertiary Centre.

Atul Kumar Vyas¹, Amit Katlana¹, Abhinav Singh², Sandeep Thakur², Anil Yadav²
¹Associate Professor, Department of Surgery, IMCHRC, Indore.
²Postgraduates, Department of Surgery, IMCHRC, Indore.

Received: April 2017
Accepted: April 2017

ABSTRACT

Background: Fistula in ano is one of the commonest condition in coloproctological. This study is being done to Aim the incidence of fistula in ano in rural population as well as results of fistulotomy surgery. Methods: This study has been conducted in department of surgery Index Medical College Hospital and research Centre, village khudel, dist. Indore from July ’14 to January’17. In all 92 patients were included of Low fistula in Ano during above mentioned period. All 92 patients were subjected for fistulotomy surgery. The present study has been done to see incidence of low level fistula in ano in rural population and male female ratio along with the outcome of one surgical procedure i.e. fistulotomy in terms of post-operative pain, duration of wound healing, infection, incontinence and recurrence. Results: Incidence of fistula in ano in rural area was grossal around 8.6 per 1 lakh population and male: female ratio was 11.8:1. Patients age group belong to 22yr to 55yr, mean age was around 38yr post-operative pain remained for 2.9± 2 days, duration wounds healing 28.5 ± 7days.No patient had anal incontinence and only 3 patients out of 92 (3.2%)had Recurrence. Conclusion: Incidence of low fistula in ano in rural papulation of distt. indore is around 8.6 per 100000 and male: female ratio 11.8:1. Fistulotomy in our study is one of the ideal surgical procedure.

Keywords: Low anal fistula, fistulotomy.

INTRODUCTION

Anal Fistula is a common surgical condition which presents as an abnormal communication between the anorectum and perianal skin. It usually develops form abscess in anorectum. Anal fistula develop from anal crypto glandular region leading to Anorectal abscess and formation of fistula in ano Symptoms mostly affect the quality of life due to recurrent pain and serous or puerent discharge to sever sepsis. Low level fistula open in to the anal canal below the anorectal ring,around dentate line. There are different surgical procedures to treat fistula in ano. We have taken Fistulotomy for treatment of fistula in ano in our study due to its excellent results.

MATERIALS AND METHODS

This study was conducted in department of surgery Index Medical College Hospital and research centre, Indore from June ’2014 to January ’2017. In this study we included 92 patients of low fistula in ano admitted during the study period, all 92 patients were subjected to fistulotomy. All low anal fistulas with any age, any gender were included in our study, only high fistula, malignancy, inflammatory bowel disease, irradiated or severely sick patient were excluded. Written consent were obtained from all patients before the study. The steps of operative interferences were explained to all patients. The technique was evaluated in terms of healing time, post-operative pain, complication, recurrence and outcome.

RESULTS

In the period of 2.5 year, the common age group affected by fistula in ano was found to be 22 to 55 years. The youngest patient was 22 years of age and the oldest 55 years

| Age group (in year) | No. of cases | Percentage |
|---------------------|--------------|------------|
| 22 to 32            | 20           | 21.74      |
| 32 to 42            | 49           | 53.26      |
| 42 to 55            | 23           | 25.00      |
| Total               | 92           | 100        |

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

Post-operative pain was 2.9±2 days for fistulotomy.
Annals of International Medical and Dental Research, Vol (3), Issue (3) Page 29

**Table 3: Post-operative wound Infection in patients.**

| Infection in patient | Total patients | Percentage |
|----------------------|----------------|------------|
|                      | 7              | 6.4%       |

(7(seven) patients (6.4%) had wound infection.

**Table 4: Post-operative healing time of wound.**

| Total Patients | Minimum healing time (days) | Maximum healing time (days) | Mean healing time (days) |
|----------------|----------------------------|-----------------------------|--------------------------|
| 92             | 22                         | 45                          | 28±7/day                 |

Post-operative wounds healed earlier in (28±7days).

**Table 5: Post-operative anal incontinence among various groups.**

| Incontinence in patients | Total patients | Percentage |
|--------------------------|----------------|------------|
|                         | 0              | 0%         |

No incidence of anal incontinence in both group.

**Table 6: Post-operative recurrence in various groups.**

| Recurrence in patients | Total patients | Percentage |
|------------------------|----------------|------------|
|                        | 3              | 3.2%       |

Recurrence developed in 3 patients out of 92 (3.2%) of fistulotomy.

**Time for return to routine work after surgery**

Minimum time required is 3 days and maximum time required is 10 days, average time required is days with mean 4.55 days.

**DISCUSSION**

In our study, the most common age group affected by fistula in ano was found to be 32 to 42 years which coincides with most of studies. In our study mean age is 38.5±5years.Buie 1960 quotes 42 years as the average age for Fistula-in-ano, after a study of 5325 cases. Fifty percent of cases were between 30 and 50 years of age. In our study, the disease was prevalent in males consists of 85 male and 7 female. Male to female ratio is 11.8:1. In our study 88% are males which coincides with most of studies. Gabriels (1937) observed the preponderance of males over females in cases of fistula-inano in the proportion of 3:1. In 1957, Lockhart Mummery agreed with this observation. Buie (in 1960) showed males to make 68.8% of cases of fistula-in-ano. Khurana et al (1972) observed that 91% of their patients were males.

In our study, post-operative pain period of fistulotomy was significantly less, with mean duration of 2.9±2 days for fistulotomy. Pain was categorized as mild, moderate and severe. In patients of fistulotomy around 70% patients had mild pain and 30% had moderate pain.

All the patient after fistulotomy responded to simple analgesic like diclofenac sodium and that too is required for very short duration average of around 1 week.In our study, wound infection is observed being significantly of shorter duration in fistulotomy most common complication after surgery was wound infection, it is very low after fistulotomy, occurring in only 6.4%. Time taken for wound to heal is very low in patients of fistulotomy, with average duration of 28 days with mean 28±7 days. Kronborg who demonstrate a shorter healing times (34 days vs. 41 days) with fistulotomy patients. Anal incontinence is not seen in any patient after fistulotomy. All those patients were kept in close follow up. None of the patients was found to have anal incontinence during a follow-up period. This observation is logical as all the internal openings were located in the lower anal canal in our patients. In agreement with other randomized clinical studies (Lindsey et al., 2002; Jain et al., 2012). Recurrence is least common after fistulotomy, occurring in only 3.2%, recurrences occurred in 3 patients after between 1-6 months. Other study was conducted in North India between September 2008 through April 2010 on Forty patients with simple anal fistula, reported no case of recurrence and anal incontinence. (Jain et al).

**CONCLUSION**

Incidence of low fistula in ano in rural population of distt. indore is around 8.6 per 100000 and male:female ratio 11.8:1. fistulotomy in our study is one of the ideal surgical procedure.

Fistulotomy can be recommended as a standard surgical procedure in the treatment of low anal fistula for the merits of early wound healing, less post-operative pain, lower rates of wound infection, early hospital discharge and lesser incidence of recurrence.

**REFERENCES**

1. Bacon.H.E, Stuart.T.Ross, and Porfirio Mayo Recro : Proctology, J.B. Lippincort Co. PP, 88-108, 1956.

2. Buie. L.A : Practical Proctology, 2nd Edn. 1960.

3. Khurana, C., Saronwala, K. C. and Gupta, S. P.: Primary skin grafting after fistulectomy in the treatment of fistula in ano. Amer. J. Proctol., 23: 139-152, 1972.

4. Deshpande, P. J., Pathak, S. N., Sharma, B. N. and Singh, L. M.: Treatment of fistula in ano by Kshara Sutra. J. Res. Ind. Med., 2: 131-139, 1968.

5. Deshpande, P. J. Pathak and Sharma, K. R.: Non-operative ambulatory treatment of fistula in ano by a new technique. Review and follow-up of 200 cases. Amer. J. Proctol., 24: 49-60, 1973.

6. Gabriel, W. B.: "The Principles and Practice of Rectal Surgery." 5th Edition. H. K. Lewis and Co. Ltd., London, 1963, pp. 6, 268, 289-313.

7. Kumar.R, Gupta.A.K, and Mathur.D : Anal fistula : A nonoperative method of treatment. A report of 100 cases. Indian journal of Surgery, 49 : 239-243, july 1987.

8. Agarwal D, Arora D, Avasthi A and Singhal S .Scholars Journal of Applied Medical sciences Sch. J. App. Med. Sci.,
9. Kronborg O. To lay open or excise a fistula-in-ano: a randomized trial. Br J Surg. 1985;72:970. [PubMed]

10. Athanasiadis S, Helmes C, Yazigi R, Köhler A. The direct closure of the internal fistula opening without advancement flap for transsphincteric fistulas-in-ano. Dis ColonRectum. 2004 Jul;47(7):1174-80. Epub 2004 May 19.

11. Khurana, C., Sarowalwa, K. C. and Gupta, S. P.: Primary skin grafting after fistulectomy in the treatment of fistula in ano. Amer. J. Proctol., 23: 139-152, 1972

12. Imran Anwar, Zahid Niaz, Ahmad Muneeb, Khalid M Cheema, Anna Moeen. Fistulotomy a better treatment modality than Fistulectomy for low Fistulo in Ano. Ann King Edward Med Coll Apr - Jun 2003;9(2);171-2.

13. Jain BK, Vaibhaw K, Garg PK, Gupta S, Mohanty DJ. Korean Soc Coloproctol. 2012 Apr; 28(2): 78–82. Published online 2012 Apr 30. doi: 10.3393/jksc.2012.28.2.78

14. Bhatti Y, Fatima S, Shaikh GS, Shaikh S. Fistulotomy versus fistulectomy in the treatment of low fistula in ano. Rawal Medical Journal, PMAR; vol36, no4; octdec, 2011;1-8.

How to cite this article: Vyas AK, Katlana A, Singh A, Thakur S, Yadav A. Incidence of Low Fistula in Ano and Results of Fistulotomy in Rural Tertiary Centre. Ann. Int. Med. Den. Res. 2017; 3(3):SG28-SG30.

Source of Support: Nil, Conflict of Interest: None declared