ORIGINAL PROF-2278

FISTULA IN ANO;

PRESENTATION AND POSTOPERATIVE OUTCOME OF THE DIFFERENT SURGICAL PROCEDURES IN LOW TYPE.

Dr. Amir Iqbal Memon, Dr. Asim Hussain, Dr. Gul Sher, Prof. Dr. Muhammad Ishaq

ABSTRACT… Objective: This study was planned to find out the clinical presentation and postoperative outcome of different surgical procedure in low type in low fistula in Ano. **Design:** Prospective observational study. **Place and duration of the study:** Study was conducted in teaching hospital setting at LUMHS Jamshoro, Zia ud Din Teaching Hospital Karachi and DHQ JMC Teaching Hospital Charsadda. Liaquat University in Surgical Unit-I Jamshoro from May 2010 to June 2012. **Patients Methods:** One seventy cases of low type fistula in Ano with single external opening, irrespective of age and sex admitted in surgical unit-I, were examined. Mean age was 37 years, patient's rages from (15-60 years). Patients having high type fistula in ano identified pre and per operatively excluded from the study. A detailed history physical examination including local examination of anorectum focusing on the level of internal opening. Investigation like fistulogram done in selected case. Fistulectomy and fistulotomy performed in all these cases and patient followed up minimum upto the 6 months time. **Results:** Maximum Number of cases were seen in 3rd,4th, decade of life 50 (29.6%) and 64 (37%) respectively. Mean age was 37 ranges from 15 to 60 years. Out of 172 patients 142 (85.7%) male and 24 (14.3%) female. Male to female ratio was 6.1:1. Majority of patients one forty two (82%) presented with discharge. Discharge along with swelling in 132 (76.7%). Hundred twelve (65%) underwent fistulectomy, 38 (22%) of the patients got fistulotomy and (12%) of patients underwent fistulectomy along with haemorrhoidectomy and fissurectomy. A total of 72 (41.4%) patients experience different post operative, surgical and anesthetic complications. **Conclusions:** Incidence of low type fistula in ano is higher in 3rd and 4th decade of life. The disease was found more common in male, discharge, pain, itching are common symptoms of low type fistula in ano. In low type fistula in ano fistulotomy is safe procedure. Post operative complications can be prevented by careful treatment efforts.

Key words: Fistula in ano, Fistulectomy, Fistulotomy.

Article Citation
Memon AI, Hussain A, Sher G, Ishaq M. Fistula in ano; Presentation and postoperative outcome of the different surgical procedures in low type. Professional Med J 2013;20(5): 783-786.

INTRODUCTION

Fistula word derived from latin language means a pipe. Anal fistula is a track lined with granulation tissue having an external opening on the perianal skin and internal opening in the anal or rectal mucosa[1], it occurs due to infection of procodael gland or Hermann and defosses anal gland[2,3], fistula in ano is divided into high and low variety depending upon fistulous opening, either above or below the anorectal ring respectively. Persistent discharge and pain causes mental & social problems for the patients. Tuberculosis commonly causes fistula in ano in developing countries. Female patients usually avoiding for treatment because of the location of the pathology. Due to common surgical problem in our country. This study was conducted to find out the presentation and postoperative outcome of the different surgical procedures for the low type fistula in ano.

PATIENTS AND METHODS

One seventy two cases of low type fistula in ano having single external opening admitted in surgical unit-1, LUMHS Jamshoro, Zia ud Din Teaching Hospital Karachi and DHQ JMC Teaching Hospital Charsadda. Irrespective of age & sex, were examined. Patients between the age of 15-60 years were examined, mean age was 37 years. Patients having high type fistula in ano identified pre and per operatively and patients lose follow up excluded from the study. Mean follow-up period was 6 months. A detailed history clinical examination including local anorectal examination done in all these patients while/focused specially on the level of internal ring. Fistulectomy, fistulotomy, fistulectomy along with haemorrhoidectmy, fistulectomy with fissurectomy were the procedure performed. Fisutolograun done in cases where need arises. Fistulous tract postoperatively submitted for histopathology.

RESULT

When results were summed and test parameter was compared, it was seen that maximum number of cases were seen in 3rd and 4th decade of life i.e, 50 (29.6%) and 64 (37%) respectively. No any patient observed above the age of 60 and below the age of 15 years. Out of 172 patients 142 (85.7%) male and 24 (14.3%) female. Male to female ratio was 6.1:1 as shown in table I.

One forty two (82%) of the patients presented with discharge and swelling with discharge around anal canal in 132 (76.7%) of the patients. Discharge was mainly watery but in few cases it was thick. Itching was found in 70 (40.4%) of the patients bleeding per rectum also observed in 26 (12.2%) of the patients. The 172 patients 22 (12.2%) of the patients having associated local perianal disease, sixteen (9.3%) having haemorroids and six (3.6%) having fissure in ano along with fistula in ano. Internal opening of the fistula were identified in 82 (47.6%) of the patients on per-rectal and ano proctoscopic examination. In remaining 90 (52.3%) no internal opening was identified by above mentioned method.

In all 172 patients internal opening of low type fistula in ano identified by passing probe through external opening of fistulous tract of the 172 patients 112 (65%) under went fistulectomy and 38 (22%) of the patients got fistulotomy. Fistulectomy along with haemorrhoidectomy was done in 16 (9.3%) and fistulectomy with fissurectomy was done in 6 (3.4%) of the patients. A total of 72(41.4%) patients experienced different post operative surgical and anesthetic complications twenty four (13.9%) developed post spinal headache, 20 (11.6%) have retension of urine, 16 (9.3%) experienced found infection, recurrence of fistula found in 6 (3.4%), anal stenosis found in 4 (2.1%) hypertrophic scan seen in 2 (1.11%) of cases as shown table V.

Histopathological results shows that out of 172 patients, 164 (95.3%) having non specific chronic inflammation, remaining 8 (4.6%) patients were having tuberculosis.

Symptoms	Frequency	%age
Discharge at anal canal	142	82.5%
Swelling along with discharge	132	76.7%
Itching around anus	70	40.4%
Bleeding per anum	26	15.1%

Table-I. Clinical presentations of patients (N=172)

Age	Frequency		%age	
	Male	Female	Male	Female
11-20y	28	-	16.2%	-
21-30y	46	4	26.7%	2.9%
31-40y	56	8	32.5%	4.6%
41-50y	12	6	6.9%	3.4%
51-60y	06	6	3.4%	3.4%
Total = 172	148	24	85.7	14.3

Table-II. Age Distribution

Procedure	Frequency	%age
Fistulectomy	112	65%
Fistulotomy	38	22%
Fistulectomy + Haemorrhoidectomy	16	9.3%
Fistulectomy + fissurectomy	6	3.4%

Table-III (N=172)

DISCUSSION

The fistula-in-ano is a common perianal condition in surgical practice. Talpur K.A have described the average age of presentation 37.2 years, with maximum incidence in 3rd, 4th and 5th decade[5]. Hill in his series of 626 patients also noted highest incidence in

Complications	Frequency	%age
Post spinal headache	24	13.9%
Retention of urine	20	11.6%
Wound infection	16	9.3%
Recurrence of fistula	06	3.4%
Anal stenosis	04	2.1%
Hyper trophic scar	02	1.1%

Table-IV. Post operative complications (N=172)

4th, 5th and 6th decade of life. Present study is compatible with above studies[5,6] as highest incidence(59.2%) was seen in 3rd and 4th decade of life. Hill has also found condition in 5th and 6th decade of life which is in contrast to our study. Disease commonly affects man read and abcarian and Mc Elwain reported male to female ratio of 2:1 and 3:1 respectively[7,8] whereas in our study, The male to female ratio was 6.1:1. However exact cause is unknown low incidence in females in our study may be due to most female in our society are reluctant to examine to their parianal region.

This study was based on low type fistula-in-ano. Majority of fistulas are simple in nature and may be assessed accuretly during clinical examination by experienced coloproctologist[11]. However normal anatomy, perianal fistula tract and sphincter defect are now a days better assessed by endosonography and MRI[12,13]. Dynamic contrast enhanced magnetic resonance (DCEMRI) have more sensitivity (97%) and specificity (100%) in detection of fistula[14].

The majority of anal fistula are anatomical simple (low variety) and easy to treat but a significant number are of high variety and anatomically complex and difficult to treat[15]. All low type fistula in this study were treated by fistulectomy 77.7% and fistulotomy (22.3%) low lying anal fistulae responded well to simple fistulectomy or by simple laying open technique (fistulotomy), without division of anal sphincter muscles and thus without danger of permanent incontinence[16,17]. Surgical treatment of anal fistula is associated with significant risk of recurrence and a high risk of incontinence[18]. In our study recurrence was found in 3.4% cases anal stenosis in 2.1%. factors associated with recurrence includes tuberculosis of perianal region and the experience of the surgeon recurrence can also be seen in low variety fistulae (6.5%) by sangwan, because they may not have readily detectable primary opening and possess secondary tract[19]. Anal stenosis observed in those patients who undergone haemorrhoidectomy along with fistulectomy, possibly due to excessive removal of skin.

Histopathological examination of fistulous tracts revealed non-specific chronic inflammation in 95.3% of cases, remaining (4.7%) patient having tuberculous. Tuberculosis involving anal and perianal region is very rare in western countries. It has diversity of clinical presentation inducing acute perianal abscess, chronic anal ulcers and fistula – in – ano. But it is quite common in developing countries as observed by Talpur KA (11.8%). In our study tuberculosis was assessed in 3.4% of cases, possibly due to improvement in diet and also low variety fistulae in our study.

CONCLUSIONS

The incidence of low-type fisula-in ano is higher in 3rd and 4th decades of life. The incidence of disease is higher in male, discharge, pain, itching are common symptoms of low-type fistula-in-ano. In low type fistula in ano fistulotomy is safe procedure. Postoperative complications recurrence, incontinence can be presented by care full treatment efforts.

REFERENCES

1. Marks CG, Ritchie JK. **Anal fistulas at st.** marks Hospital. Br. J Surg 1977; 64: 84 .

2. Raghavajan NV. **Anal fistula in India.** In surg

1976;61:43.

3. Girona J , Denkers D. **Fistula, fissure, abcess.** Chirurg 1996;67(3):222-8.

4. Tissot O, Bonder D, Henry L, Dubrenil A, Valethe PJ. **Anoperineal fistula in MRI : contribution of T2 weighted sequence.** J Radiol 1996;77(4):253-60

5. Talpur KA, Memon As., Memon JM, **A three years experience at Liaquat medical college Hospital, Jamshoro.** Pak J Surg 1998;14(3&4):78-82.

6. Mc Coutney JS, Finley IG. **Seton in the surgical management of fistula-in-ano.** Br. J Surg1995;82 (4):448-52.

7. Read DR, Abcarian H. **A Prospective survey of 474 patients with anorecteal abcess.** Dis colon rectum 1979;22: 566-8.

8. Me Elwan JW Mactean MD, Alexander RM. **Norectal problem; experience with primary fistulectomey for anorecteal abcess, a repot of 1,000 cases.** Dis colon Rectum 1995;18:646-9

9. Lunnis PJ, Jankins PJ, Besser GM, persy LA, Phillips RK. **Gender difference in incidence of idiopathic fistula-in-ano not explained by circulating sex hormones.** INT J Colorectal Din. 1995; 10(I): 25-8.

10. Choen S . Burnett S.bartram Ci. Nicholls RU. **Comparison between anal endoosonography and digital examination in the evatuation of anal fistulae.** Br J Surg 1991;78:445-7.

11. Cho. DY. **Endosonographic criteria for an internal opening of fistula-in-ano.** Din colon Rectum 1999;42(4): 515-8.

12. Beetstan RG Beets GL. Vander Hoop AG. Kessels AG. Vligen RF, Baetan CG, Van Engelshover JM. **Prospective MR imaging of anal fistulas: does it really help the surgeon.** Radiology 2001 Jan 218(I) : 75-84.

13. Barker PG, Luniss PJ. Armstrong P. Reznek RH. Cotton K. PHillops RK. **Magnetic resonance imaging of fistula-in-ano: technique, interpretation and accuracy.** Clin Radiol 1994: 49(I) : 7-13.

14. Ortiz H and Marzo J. **Endorectal flap advancement repair anfistulectomy for fistulas.** Br J Surg 2000;87(12):1680-3.

AUTHOR(S):

1. **DR. AMIR IQBAL MEMON**
   Assistant Professor
   Department of Surgery
   Liaquat University of Medical & Health Science
   Jamshoro, Sindh
2. **DR. ASIM HUSSAIN**
   MBBS, MCPS D.Ortho
   Department of Orthopaedic Surgery
   Zia-ud-Din University, Karachi
3. **DR. GUL SHER**
   MBBS, FCPS
   Assistant Professor
   Department of Surgery
   Jinnah Medical College, Peshawar
4. ***Prof. Dr. Muhammad Ishaq***
   MBBS, FCPS (Pesh), FRCS(England), FRCS(Glasgow), FRCS(Ire)
   Department of Surgery
   Jinnah Medical College, Peshawar

Correspondence Address:
Dr. Amir Iqbal Memon
Associate Professor Surgery (OPS)
LUMHS, Jamshoro
Assistant Professor's
Bungalows No-13 Doctor's Residential Colony,
Liaquat University of Medical & Health Sciences,
Jamshoro, Sindh Pakistan.
dr_amiriqbalmemon@yahoo.com
dr_amiriqbalmemon@hotmail.com
dramirmemon@gmail.com

Article received on: 27/05/2013
Accepted for Publication: 20/08/2013
Received after proof reading: 20/09/2013

PREVIOUS RELATED STUDIES

Tayyab Abbas , Abid Nazir, Waseem Sadiq. MANAGEMENT OF FISTULA IN ANO (Original) Prof Med Jour 16(1) 25-29.Jan, Feb, Mar 2009