ORIGINAL PROF-772

CHRONIC FISSURE-IN-ANO;
LATERAL INTERNAL SPHINCTEROTOMY VS MANUAL DILATATION OF ANUS

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ABSTRACT... faisalblodhi@hotmail.com **Aims and Objectives:** (1) To compare the effectiveness of manual dilatation of anus and lateral internal sphincterotomy in chronic anal fissure. (2) To calculate the complications rate i.e. incontinence, and recurrence of disease in two procedures. **Setting:** Allied/ DHQ Hospitals (PMC) Faisalabad. **Period:** From August 1999 to September 2001. **Design:** A prospective randomized study. **Materials and Methods:** Consecutive forty patients (Male-26, Female-14) irrespective of age and sex were included in this trial, after taking written informed consent. The diagnosis of chronic fissure-in-ano was made on the basis of typical clinical features. The diagnosis was confirmed on examination under anaesthesia (EUA). Sigmoidoscopy was done in all cases to look for evidence of any associated disease. Biopsy of the fissure was taken to sort out the aetiological factors like tuberculosis, Crohn's disease and carcinoma. **Randomization:** Patients having odd serial number were treated by manual dilatation of anus and patients having even serial numbers were dealt with by lateral internal sphincterotomy either under spinal or general anaesthesia. A follow-up was done for 3,6 and 12 weeks. **Technique:** Patients having chronic fissure-in-ano were admitted in the ward from outpatient department. MDA was performed as described by Watts et al. Lateral internal sphincterotomy was always performed on the left lateral side with the patient in the lithotomy position. Patients were followed-up regularly at intervals of 3,6 and 12 weeks. At follow-up, symptoms were assessed on a pre-designed questionnaire. Statistical evaluation was done by t-test. **Conclusion:** Lateral internal sphincterotomy is the treatment of choice in patients with chronic fissure-in-ano resistant to conservative measures. It has no permanent side effects and is well tolerated.

KEY WORDS: Chronic Anal Fissure, MDA, Lateral Sphincterotomy.

INTRODUCTION

This is a prospective randomized study carried out from August 1999 to September 2001 at Allied Hospital, DHQ Hospital (PMC) Faisalabad. Manual dilatation of the anus (MDA) and lateral internal sphincterotomy were compared for the treatment of chronic fissure-in-ano.

Chronic fissure-in-ano is a common surgical disease[1]. A number of modalities for the treatment of fissure-

in-ano are being tried now a days[2]. The use of Glyceryl Trinitrate (GTN) ointment to cause chemical Sphincterotomy and botulinum toxin injections to cause time-limited paresis of internal sphincter are amongst these new modalities. Although results of these modalities are encouraging, yet these are still to be tried in our country and when these modalities prove ineffective, then surgical measures i.e. manual dilatation of anus and lateral internal sphincterotomy are advisable[5].

AIMS & OBJECTIVES

1. To compare the effectiveness of manual dilatation of anus and lateral internal sphincterotomy in chronic anal fissure.

2. To calculate the complications rate i.e. incontinence, and recurrence of disease in two procedures.

A. Criteria of Inclusion

The patients (all age groups, both male and female) having chronic fissure-in-ano with inflamed, indurated margins and base consisting of scar tissue with a sentinel-pile at its inferior extremity.

B. Criteria of Exclusion

The patients with inflammatory bowel diseases, previous ano-rectal surgery, granulamatous & neoplastic diseases were excluded from this study.

MATERIALS & METHODS

Consecutive forty patients (Male-26, Female-14) irrespective of age and sex were included in this trial, after taking written informed consent.
The diagnosis of chronic fissure-in-ano was made on the basis of typical clinical features.

The diagnosis was confirmed on examination under anaesthesia (EUA). Sigmoidoscopy was done in all cases to look for evidence of any associated disease. Biopsy of the fissure was taken to sort out the aetiological factors like tuberculosis, Crohn's disease and carcinoma.

Randomization

Patients having odd serial numbers were treated by manual dilatation of anus in patients having even serial numbers were dealt with by lateral internal sphincterotomy either under spinal or general anaesthesia. A follow-up was done for 3,6 and 12 weeks.

Technique

Patients having chronic fissure-in-ano were admitted in the ward from outpatient department.
MDA was performed as described by watts et al.
Lateral internal sphincterotomy was always performed on the left lateral side with the patient in the lithotomy position. Patients were followed-up regularly at intervals of 3,6 and 12 weeks. At follow-up, symptoms were assessed on a pre-designed questionnaire. Statistical evaluation was done by t-test.

RESULTS

In this prospective randomized study, mean age of patients was 30 years (10-88) (table-II).

Table-I. Modalities of treatment adopted in the treatment of fissure-in-ano

Modality	No. of Patients
Lateral Internal Sphincterotomy (LIS)	20
Manual Dilatation of Anus (MDA)	20
Total	40

Male to female ratio in our study was 1.9:1. Fissure-in-ano was present at 6' O clock position in 26 (65%) patients. (Table -III & V)

Satisfactory relief of pain and healing of fissure were achieved in all except two of the patients treated by manual dilatation of anus ($P<0.05$). These patients were retreated 12 weeks later by lateral internal sphincterotomay. One patient treated by lateral internal sphincterotomy developed a small abscess in the wound after a week of operation. Incision and drainage of the abscess was done and the wound healed satisfactorily.

Table-II Age Distribution		
Age (Years)	**No. of Patients**	**%age**
0-10	2	5 %
11-20	5	12.5 %
21-30	14	35.0 %
31-40	7	17.5 %
41-50	7	17.5 %
51-60	2	5 %
61-70	2	5 %
71-80	0	0 %
81-90	1	2.5 %

Table-III Fissure-in-ano Sex Ratio		
Sex	**No. of Patients**	**%age**
Male	26	65 %
Female	14	35 %
Total	40	100 %

Table-IV Symptomatology of Fissure-in-ano		
	No. of Patients	**%age**
Pain on defecation	40	100%
Constipation	38	95%
Bleeding per rectum	21	52.5%
Discharge per rectum	4	10%
Pruritus	8	20%
Sentinel pile	38	95%

Among 20 patients, treated by MDA, 2(10%) patients, had symptoms and signs of recurrent fissure after six weeks. These two patients with recurrent fissure underwent lateral internal sphincterotomy whereas none of the patients treated by LIS suffered from recurrence ($P<0.002$). Permanent impaired control of faeces was present in 2(10%) treated by MDA compared with none of the patient in other group.

Table-V Fissure-in-ano Sites of Occurance		
Site)	**No. of Patients**	**%Age**
At 6'O Clock Position	26	65%
At 12'O Clock Position	14	35%

Table-VI Lateral Internal Sphincterotomy	
No. of Patients	20
Follow up range	1-12 Weeks
Follow up mean	6.5 Weeks
Pain Free	20(100%)
Abscess formation	1(5%)
Transient incontinence	0(0%)
Permanent incontinence	0
Recurrence	0

Table-VII Manual Dilatation of Anus	
No. of Patients	20
Follow up range	1-12 Weeks
Follow up mean	6.5 Weeks
Pain Free	18 (90%)
Transient incontinence	7 (35%)
Permanent incontinence (Soiling)	2 (10%)
Recurrence	2 (10%)

As per recommendations, we performed 20 MDA's and 20 Lateral Internal Sphincterotomies. Lateral Internal Sphincterotomy was performed in 20 patients. Procedure was performed under either general or spinal anesthesia.

Manual dilatation of anus was performed in 20 patients. This was performed under either general or spinal anesthesia.

DISCUSSION

These findings show that lateral internal sphincterotomy is better than simple anal dilatation for the treatment of chronic fissure-in-ano. The recurrence rate of fissure was significantly higher after anal dilatation than after lateral internal sphincterotomy and functional results with respect to control of flatus and soiling were significantly better in patients treated by lateral internal sphincterotomy.

Our study confirms the results of other similar studies. In manual dilatation of anus, pain relief was present in 19 (95%) patients out of 20 patients. Transient incontinence was noted in 07(35%), permanent incontinence in 02 (10%).

In lateral Internal sphincterotomy, pain relief was present in 20 (100%), transient incontinence in 0(0%), abscess formation in sphincterotomy is 1(5%), permanent incontinence in 0(0%). This prospective study has, to a great extent confirmed the findings of a recently published retro-spective study of comparison of the two procedures performed under general anesthesia[6].

The complications and recurrence rates in our study are comparable to the study of comparison of manual dilatation of anus and lateral internal sphincterotomy published in British Medical Journals[3]. In our study, out of forty patients, recurrence was noted in only 2 patients (5%). In these two patients, the operative modality used was manual dilatation of anus and recurrence rate was zero in lateral internal sphincterotomay which is also comparable to the studies published in international journals during the last few years[3,6]. Our study has, to a great extent confirmed the findings of recently published retrospective study of comparison of MDA and LIS under general anaesthesia published in Journal of USA[4].

CONCLUSION

Lateral internal sphincterotomy is the treatment of choice in patients with chronic fissure-in-ano resistant to conservative measures. It has no permanent side effects and is well tolerated.

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CORRECTION

The amendment of The Professional Vol: 7, No.2 (PROF-427) Page 169 is as under.

INCORRECT

ORIGINAL **PROF-427**

PRIMARY INTRA-CRANIAL BRAIN TUMOURS;

A CLINICO-PATHOLOGICAL STUDY

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