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Treatment of fissure in Ano-conservative treatment with diltiazem and surgical treatment with lateral sphincterotomy: Two faces of same coin

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Abstract

Background: Fissure in Ano is a most troubling and painful condition that affects a great majority of population world over. It is one of the common reason of bleeding per anus. Though the nature and anatomy of fissure in Ano is quite clear still the method of treating them with optimal clinical results and least pain and inconvenience to the patient is still open to debate. Hence this study is intended to know conservative treatment method and to offer the patient the same, who are not willing for operative procedure. In the present era of evidence based medicine, in order to reduce the need for anesthesia and surgery this study is intended.

Methods: The present study was conducted in 100 patients at Department of Surgery who have been clinically diagnosed as chronic fissure in Ano and also who are admitted in surgery ward for surgical treatment. Group – A: 50 patients who are subjected to chemical sphincterotomy with 2% Diltiazem gel used topically. Group – B: 50 patients who underwent Lateral sphincterotomy.

Results: In present study 42/50 patients treated with conservative treatment got relief from pain and cured of fissure compared to that with surgical treatment. Hence 84% of patients were not exposed to surgical risk and were cured effectively with conservative treatment.

Conclusions: Conclusion drawn from our study is that conservative treatment with Diltiazem very effective in the treatment of chronic fissure in Ano. This method can, not only be offered to the patient who are not willing for operative procedure but also it significantly reduces the need for anesthesia and surgery in many patients.

Keywords: Chronic fissure in ano, lateral sphincterotomy, diltiazem, DRE

Introduction

Fissure in Ano is one of the most common complaint with which patient attains surgical OPD ^[1]. Fissure in Ano is a longitudinal tear in the Anoderm. It is classified as 1) Acute or Superficial. 2) Chronic fissure in Ano ^[2].

Predisposing factors mainly include faulty dietary habits leading to constipation, which includes consumption of spicy food and irregularity of diet, faulty bowel habits and lack of local hygiene ^[3].

In female – problem usually starts during pregnancy and Lactation ^[4].

Posterior fissure are commonly seen as the blood supply to Anoderm at the posterior midline is significantly lower ^[5].

Regarding treatment aspect there are two options firstly Conservative method which is most readily accepted by patients, and Secondly surgical method of treatment ^[6].

In order to reduce the burden of surgery faced not only by general surgeon but also by patient and society. As a whole conservative method of treatment is important. Since operative method results in socioeconomic impact in the form of hospital expenses, lost working days and declining productivity it stands as a second line of management ^[6, 7].

Methods

In this study all patients who came to surgical OPD with Chronic fissure and also who are admitted in surgical ward for surgical treatment of fissure are source of study. Clinical profile, investigation, treatments, outcomes were analysed.

Data collected in predesigned proforma, regarding Patient Biodata, presenting complaints, DRE

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(Digital Rectal Examination) findings.

Inclusion criteria all patients age >18 years,

Exclusion criteria was those patients not willing to participate in study.

Results

In our study 100 cases were included who were divided into group A of 50 cases and group B of 50 cases which included both Male and Female patients, whose age varied from 20-60 years.

Table 1: Sex-wise distribution

Sex	Number of cases	Percentage (%)
Male	46	46
Female	54	54
Total	100	100

In our study 54 patients were female and 46 patients were male. Maximum number of patients were within the age group of 30-45 years i.e., 60%.

The present study shows Chronic fissure in ano are a common problem in female population.

Presenting Symptoms

Table 2: Presenting symptoms

Symptoms	Number of cases	Percentage (%)
Pain (burning type)	98	98
Bleeding	84	84
Itching	9	9

DRE Findings

Table 3: DRE findings

DRE findings	Number of cases	Percentage (%)
Posterior fissure	80	80
Anterior fissure	12	12
Multiple fissure	08	8

The present study shows position of fissure at Posterior aspect, Anterior fissure common in females.

Preoperative Evaluation

A haemoglobin level of 10 gm/dl was accepted for the surgery. Blood transfusion was given to selected patients to improve the haemoglobin level. Associated medical illness were treated accordingly before taking the patient to surgery.

Type of treatment

Table 4: Type of treatment

Type of Treatment	Number of cases	Percentage (%)
Chemical sphincterotomy with 2% Diltiazem gel	50	50
Lateral sphincterotomy	50	50

In our study 50 patients underwent chemical sphincterotomy with 2% Diltiazem gel topical application and 50 patients undergone Lateral sphincterotomy.

Operation

Type of Anesthesia in Lateral sphincterotomy group –

Regional Anesthesia

Table 5: Operating room time

Type of operation	Operating room time
Lateral sphincterotomy	35 min

The operating room time for Lateral sphincterotomy is approximately 35 minutes.

Complications

Table 6: Postoperative complications

Postoperative complications	Lateral sphincterotomy	Percentage
Wound infection	5	10
Haemorrhage	2	4

Table 7: Complications of chemical sphincterotomy with 2% Diltiazem gel Group

Complications	Number	Percentage (%)
Itching	8	16
Mild head aches	3	6

In our study 8/50 in chemical sphincterotomy with 2% Diltiazem gel Group complained of itching, 3/50 patients complained of Mild headache.

Duration of hospital stay

Table 8: Duration of hospital stay

Operation	Length of stay (days)
Lateral sphincterotomy	3

Postoperative length of stay was 3 days, In all post-operative patients Anal pack was removed on post-op Day 1.

None of the patients in chemical sphincterotomy with 2% Diltiazem gel Group required admission, all are treated in OPD basis, with mean follow up period of 4-6 weeks.

Discussion

The present study shows Chronic fissure in ano are a common problem in female population.

Maximum number of patients were within the age group of 30-45 years i.e., 60%

Mean operating room time for Lateral sphincterotomy is around 35 minutes,

Chemical sphincterotomy with 2% Diltiazem gel Group Mean follow up period of 4-6 weeks.

In our study treatment of fissure in Ano conservative with surgical measure was compared and after the study it was known that around 80% of patients were benefitted from conservative management which was comparable to study done by Jensen SL. At 1986¹, also is much higher than in study of Cook TA, Humphreys MM⁴, McC Mortensen NJ study done at 1999.

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Declarations

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Conflict of interest: authors declare no conflict of interest

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