

Closed Lateral Internal Sphincterotomy under Local Anaesthesia in OPD in the Treatment of Chronic Anal Fissure

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Objective of this study is to provide best therapy in terms of hospital stay and post operative complications after closed lateral internal sphincterotomy under local anaesthesia in the treatment of chronic anal fissure. It is descriptive type of study carried out at Nishtar Hospital Multan, from February 2001 to April 2001. Thirty patients underwent closed lateral internal sphincterotomy in local anaesthesia in OPD. Internal anal sphincter divided up to dentate line by introducing no.11 surgical blade in the intersphincteric groove. Pts were allowed to go home just after the surgery. Follow up for complications was done for the period of 6months. Mean postoperative stay was for 12 minutes. Postoperative complications were soiling (6.6%), incontinence to flatus (3.3%) and recurrence (3.3%). CLIS can be done safely under local anaesthesia in OPD with low complication rate and less postop period of stay.

Key words: CLIS (closed lateral internal sphincterotomy) .

Anal fissure results from longitudinal tear in the squamous epithelium of anal canal. 90% are situated posteriorly and 10% anteriorly¹. Chronic anal fissure is characterized by skin tag and hypertrophied anal papilla². Hard bowel movements and prolonged diarrhea postulated to be the cause of split in the anoderm². The clinical history is typically cyclical; periods of acute pain are followed by temporary healing only to be succeeded by further acute pain. Digital examination will confirm the findings but in many instances is not possible because of severe pain.

Lateral internal sphincterotomy emerged as the general operation of choice for uncomplicated chronic anal fissure³. It is of two types, open and closed. CLIS can be done in OPD under local anaesthesia⁴ with less postoperative period of stay and complications⁵.

Patients and methods

Thirty patients were chosen who presented with features of uncomplicated chronic anal fissure in surgical OPD of Nishtar Hospital Multan from 28-02-2001 to 30-04-2001.

Patients of ages between 20 and 50yrs, both genders and having no systemic illness were included. All patients were treated with CLIS under local anaesthesia by consultant or by registrar under supervision. Preoperative antibiotic and sedation (10-20mg diazepam) were given intravenously. 0.5% lignocaine HCL with 1:200000 adrenaline used as local anaesthetic. 10ml of this was infiltrated into perianal area on each side. The inferior haemorrhoidal nerves were blocked by further 5-7ml of solution. 5ml solution also injected into external anal sphincter.

Surgical blade introduced between internal and external anal sphincter (by palpating intersphincteric groove) at 3.o, clock in lithotomy position. Blade turned inward and sphincterotomy performed by dividing internal anal sphincter up to dentate line (Figure 1). The external wound left open and patients were allowed to go home. The patient was advised to take daily sitz bath. Patients were followed up for period of six months after the

procedure. Data collected in pre designed performa and then analysed. Percentage, mean and graphical statistics were used.

Results

Mean age of presentation was 39 years. There were 26 male and 4 female patients with ratio of 6.6:1 respectively. 28 patients (93%) had posterior and 2 patients (7%) had anterior anal fissure. Postoperative hospital stay was between 10-30 minutes (mean 12 min.). 27 patients presented (Table No.1) with pain during defecation, which started just before defecation and lasted for few hours after the act. Most of these patients also complained mild bleeding per rectum. 21 patients complained bleeding per rectum as a major symptom. Two presented with perianal swelling and one with pruritis ani.

Table 1. Mode of presentation

Symptoms	n=	%age
Pain and bleeding	27	90-
Bleeding	21	70
Perianal swelling	2	6.6
Pruritis	1	3.3

Table 2. Complications

Symptoms	n=	%age
Perianal abscess	1	3.3
Soiling	2	6.6
Incontinence to flatus	1	3.3
Recurrence	1	3.3

During follow up, one patient (3.3%) developed perianal abscess that required incision and drainage. Healing rate was 97.7%. One patient (3.3%) showed recurrence and was operated in general anaesthesia. It was noted that in this patient the internal sphincter fibers were not properly divided. Two patients (6.6%) complained perianal soiling. Minor incontinence was noted in one patient (3.3%).

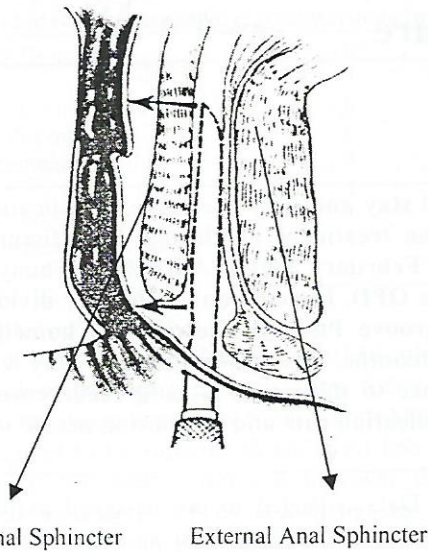


Fig. Closed lateral internal sphincterotomy

Discussion

90% patients presented with painful defecation and 70% with bleeding per rectum, which was close to 98.8% and 71.4% reported by Hananel and Gorden⁶. In this study male to female ratio was 6.6:1, but Nahas⁷ documented 2.3:1. This high percentage of males was due to the fact that most of the female patients refused the procedure under local anaesthesia in OPD. This study favoured the reports that anal fissure is common in middle age group. Melange and Colin⁸ reported mean age 45 years. In this study 28 patients (93%) presented with posterior midline fissure and 2 patients (7%) with anterior anal fissure. In most of literature², it is agreed that 90% anal fissures are posteriorly and 10% anteriorly situated.

Local anaesthesia was used for CLIS. Neufeld, Pran, Bendahen and Freund⁹ recommended subcutaneous lateral internal sphincterotomy under local anaesthesia in OPD. Hiltunen and Matikainen⁴ also recommended CLIS under local anaesthesia. Colucci, Baroli, Bruni and Selmi¹⁰ also described this technique under local anaesthesia in OPD.

Fissures healed in 97.7% patients during 4-8 weeks. In the study, which was done by Schouten, Briel, Auiverda and De-Graaf¹¹, 88.8% fissures healed within 6 weeks. In this study, patients were allowed to go home within 10-30 minutes (mean 12 minutes) because of sedative effect of diazepam.

The postoperative complication rate (Table.2) was low in this study and results were comparable with the study done by Neufeld, Pran, Bendahan and Freund⁹. In

their study, 4 patients (3.7%) developed abscess, 14 patients (12.9%) complained of mild incontinence and 3 patient (2.7%) developed recurrence. In my study one patient (3.3%) complained incontinence to flatus and one patient (3.3%) showed features of recurrence during follow up of 6 months. These results were close to the study conducted by Quedat¹² who reported minor degree of incontinence in 4% and recurrence in 3% patients during follow up of 6 months. From these statistics, it is clear that closed lateral internal sphincterotomy is the best procedure for uncomplicated chronic anal fissure due to low complication rate.

Conclusion

Closed lateral internal sphincterotomy is treatment of choice for chronic anal fissure and can be done effectively and safely under local anaesthesia in OPD with acceptable rate of complications and less post operative period of stay.

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