

Lateral Subcutaneous Internal Sphincterotomy or Anal Stretching, Which is better for Chronic Fissure: A Prospective Study of 90 Cases

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Abstract: 90 cases with chronic fissure were included in the study. Procedures were performed under spinal anesthesia and patients were reviewed after 1 week, 2 week and 3 weeks. Of total 90 cases, 45 were treated by lateral sphincterotomy and other 45 by anal stretching. 3 recurrence occurred in lateral sphincterotomy and 15 in anal stretching. Impaired control of flatus and soiling of clothes was seen in anal stretching group. It concluded that lateral sphincterotomy is better than anal stretching in chronic fissure cases

Keywords: Lateral Subcutaneous Internal Sphincterotomy, Anal Stretching

1. Introduction

Anal fissure is a longitudinal split in the anoderm of the distal anal canal¹. It is seen mostly in age group around 35 years and equally in both sexes and most common presentation is pain while defecation with or without bleeding

It is treated by 2 methods, conservative which includes laxative (stool softener), local anesthetic ointment chemical sphincterectomy or operative which include anal dilatation botulinum injection, sphincterotomy

Among operative anal dilatation and lateral anal sphincterotomy are most commonly practiced and among them which is better is controversial. So we carried out a prospective trial and cases were allotted randomly

2. Methodology

The study was done on 90 cases out of which 45 were operated by lateral subcutaneous sphincterotomy and other 45 cases by anal dilatation. Only cases with anal fissure for >6 weeks from Jan 2015 to Jan 2016 presenting in surgery department were taken for study. The cases with h/o hemorrhoids, malignant fissure, previous h/o anal surgery or atypical fissure were not included in study. The location of fissure in all cases was posterior. The procedures were performed in spinal anesthesia after proper investigation of patient like CBC, blood sugar, HIV, HBsAg, PT INR

The data was collected of patients including post operative symptoms, post operative complications and relief of symptoms.

Pre operatively fitness from anesthesia department was taken, proper bowel preparation was done and pre op Inj Metronidazole and antibiotic shot during intra operative period and 8 hours after surgery were given

Lateral subcutaneous sphincterotomy was performed on left side for 45 patients using a stab incision and division of internal sphincter by guidance of surgeons finger

Dilatation of anal sphincter was done according to Watts et al².

Post operatively patients were given Inj Diclofenac Sodium which was given as per patient required need (PRN). In this series patient were reviewed after 1week, 2week and 3 weeks in opd and assessed.

Fisher's exact test was used to evaluate the data statistically.

3. Results

Table 1: Results of treating chronic anal fissure by lateral sub cutaneous sphincterotomy and anal dilatation

	Sphincterotomy	Anal Dilatation
No of patients with immediate relief of pain	30	21
No of complications	0	0
No of recurrences	3	15
Median No of days off work	2(1-4)	3(0-6)
Median time of healing	3(1-6)	3(2-5)

Table 2: Functional results of lateral subcutaneous sphincterotomy and anal dilatation for chronic anal fissure

	Impaired control of		
	Flatus	Faeces	Soiling of clothes
Sphincterotomy(N=45)	0	0	3
Dilatation(N=45)	9	3	15

No immediate difference in effect was observed with the two treatment modalities but with further follow up the patient with lateral anal sphincterotomy 30 had better relief of symptoms compared to that anal dilatation

Among 45 patients treated with lateral sphincterotomy 30 (66.6%) had relief with no complication with recurrence

occurring in 3(6.66%) whereas in anal dilatation 21(46.66%) had relief and recurrence occurred in 15(33.33%).

The functional symptoms were way better in case of lateral subcutaneous sphincterotomy with no case of flatus and feces impairments compared to anal dilatation with 9(20%) impaired control of flatus and 3 (6.66%) impaired control of faeces. The soiling of undergarments was also way above in anal dilatation 15(33.33%) compared to 3%(6.66%)

4. Discussion

Majority of patients were of age between 31-40 with mean age of 35 years which is similar to other studies³ except that of Liratzopoulos.

Anal dilatation has been practiced for many years probably originated with Racamier(1829) and practiced for many years due to its simplicity to be done by junior or untrained staff. After introduction of sphincterotomy by Eisenhamer in 1951⁴ and less complication got popularity but due to simplicity of anal dilatation it is still preferred.

In our study the recurrence rate in anal dilatation were high as compared to that of sphincterotomy and the functional results were also better.

Patients of both had decrease in symptoms initially of pain and recurrence occurring mostly in anal dilatation which suggested that sphincterotomy to be the treatment of choice of long term management.

The prospective study were confirmed for a great extent by other publications^{5,6,7,8}. We conclude that lateral sphincterotomy is the treatment of choice for chronic fissure on long term basis.

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