

Role of *Ksharasutra* Application In The Management of Chronic Fissure In Ano

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ABSTRACT

Chronic Fissure in ano is a common life style problem worldwide. According to symptomatology, Chronic Fissure in Ano is very much close to *Parikartika*. Regarding management of this disease, a number of drugs is available but recurrence of disease is huge problem. *Ksharsutra* is well known therapy for treating various ano-rectal disorders, but *Ksharsutra* is not a choice of *Ayurvedic* surgeon in chronic fissure in ano. So the present study is conducted to evaluate the efficacy of *Ksharsutra* in the management of chronic fissure in ano. 30 patients selected for this study and divided randomly in two Groups. Groups I - Treated by *Ksharsutra*, Groups II - Treated by fissurectomy, anal dilatation and lateral/ medial sphincterectomy, analgesic and other *Ayurvedic* drugs. Patients were called for 7 follow ups- first five follow ups for the interval of seven days and then two follow ups for the interval of 12 days. Results assessed in term of burning pain in anal canal, bleeding per rectum and anal sentinel tag. The results obtained showed that *Ksharsutra* management is more effective in most situations, with better results in some circumstances. It is especially important to note that the recurrence of symptoms after completion of therapy is significantly less in the *Ksharsutra* treated group.

Key words: *Ayurveda*, Fissure in ano, *Ksharsutra*, *Parikartika*

INTRODUCTION

Fissure in ano is one of the common life style diseases. In *Fissure in ano*,^[1] patient experiences a sensation of pain as if the *Guda* (Anus) is being cut around with scissors.^[2] It derived from *Sanskrit* word '*Parikr*', which denotes all around and '*Kartanam*,^[3] which means cutting pain (around the anus). Pain is the most accepted and important symptom in this disease.^[4] *Vagbhatta* mentioned that diseases are consequence of *Mandagni* (low digestive power),^[5] which is main cause of *Vibandha* (constipation). Constipation is a complaint with multi-factorial etiology and various symptoms.^[6] Constipated people are mostly pass hard stool which breaks the smooth wall of anal verge or longitudinal tear in lower end of anal canal this condition is called fissure-in- ano (*Parikartika*).^[7] *Kshat Payu* and *Kshata Guda* are the synonyms of *Parikartika*.^[8] *Ksharsutra* with *Ayurvedic* drugs is a very effective treatment for this condition.^[9] *Ayurveda* being the oldest system of medicine, various ano-rectal diseases and their management have described.

A number of surgical management are available for the management of chronic fissure in ano as fissurectomy, anal dilatation and lateral, medial- partial sphincterectomy.^[10] Results of above management are not encouraging. However, results of an *Ayurvedic* management, *Ksharsutra*, in chronic fissure in ano are very encouraging. The *Ksharsutra* is basically a medicated thread based on *Ayurvedic* texts. It is used for different ano-rectal diseases and some other diseases too. But *Ksharsutra* management is a painful procedure and not convenient for all patients. Sometimes long duration of management and many follow ups for para-surgical procedures are more stressful for the patient.

Aim of study

This comparative study was carried to assess the effect of *Ksharasutra* and herbal drugs in the management of chronic fissure in ano.

MATERIALS AND METHODS

Sources of data

30 patients of Chronic Fissure in Ano were registered and informed consent was obtained. They were randomly divided into two groups-

Group I- 15 patients treated by *Ksharsutra*.

Group II- 15 patients treated by oral *Ayurvedic medicine*..

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Inclusion criteria

- Patients aged between 15 to 65 years.
- Patients having clinical symptom of *Chronic Fissure in ano* like burning pain in anal canal during and after defecation and bleeding.
- Patients with positive sentinel pile.

Exclusion criteria

- Patients below 15 years and over 75 years
- Patients with perianal dermatitis.
- Patients suffering from tuberculosis, malignancy and diabetes were excluded from this study.

Procedure

1. Clinical examination

Thorough clinical examination was carried out, viz. per abdominal examination, local and digital rectal examination for assessment of chronic fissure in ano, etc.

Prakriti

Deha Prakriti of each patient was analyzed as per a special proforma.

Investigations

- **Hematological:** TLC, DLC, ESR, Hb%.
- **Biochemical:** Fasting blood sugar, blood urea, S. Creatinine
- **Urological:** Urine for- routine and microscopic, culture and sensitivity
- **Ultrasonography:** whole abdomen.

2. Treatment

Group- I: *Ksharsutra* management

Group-II: *Herbal* drug management, as follows-

- *Triphala Guggulu* two tablets twice a day with warm water.
- *Abhayarisht* 20 ml twice a day after meal.
- 5 ml *Jatyadi Taila basti* before defaecation.
- *Jatyadi ghrita* for local application after sitz bath.
- *Isabgola husk* 5 gm at bed time with Luke worm water
- Sitz bath with luke warm water.
- Analgesic with muscle relaxant as per requirement.

Duration of study

It was of 59 days for both the groups.

3. Assessment of response (method of assessment and grading)

On the basis of-

- Symptoms of Chronic Fissure in Ano.
- Anal tag
- Proctoscopy

OBSERVATIONS AND RESULTS

After therapy, all the parameters of study were reviewed and recorded in the case sheet proforma. After completion of the study,

findings were analyzed and observations and results complied as mentioned below-

1. Distribution of patients according to age in both groups

In the present study, the minimum age of patient was 15 years and maximum age 65 years. 86.67% patients were of below the 50 years of age. Maximum patients in between 21-50 years of age i.e. 86.67% in group I and 80.00% in group II. [Table 1]

Table 1: Distribution of patients according to age group in both groups

Age (years)	Group-I (n=15)		Group-II (n=15)		Total (n=30)	
	No.	%	No.	%	No.	%
< 20	3	20.00	2	13.34	03	10.00
21-30	3	20.00	4	26.67	11	36.67
31-40	5	33.34	2	13.34	06	20.00
41-50	2	13.34	4	26.67	04	13.34
51-60	1	06.67	2	13.34	02	06.67
> 60	1	06.67	1	06.67	04	13.34
Total	15	100	15	100	30	100

2. Distribution of patients according to Deha prakriti in both groups

Table 2: Distribution of patients according to Deha prakriti in both groups

Prakriti	Group-I (n=15)		Group-II (n=15)		Total (n=30)	
	No.	%	No.	%	No.	%
Vata – Pittaj	09	60.00	08	53.34	17	56.67
Pitta-Kaphaj	03	20.00	04	26.67	07	23.34
Kapha-Vataj	03	20.00	03	20.00	06	20.00
Total	15	100	15	100	30	100

In this study, none of the patients belonged to *Ekdoshaja Prakriti* and *Samdoshaj Prakriti*. All of them were of *Dwandwaja Prakriti* i.e. 56.67% patients (17) of *Vata-Pittaj*, 23.34% patients (7) of *Pitta-kaphaj Prakriti* and the remaining 20% patients (6) were of *Kapha-Vataj Prakriti*. [Table 2]

Symptomatic observations

3. Showing the incidence of symptomatology in group-I

Table 3: Incidence of symptomatology in group-I

Signs & Symptoms	BT (n=15)		AT (n=15)		Difference (BT-AT)		x ² test	
	No.	%	No.	%	No.	%		
Burning Pain	15	100.00	02	13.34	13	86.67	x ² =13.39 p<0.01	HS
Anal Tag	15	100.00	00	00.00	15	100.00	x ² =0.83p >0.05	NS
Bleeding	08	53.34	01	06.67	07	46.67	x ² =0.54p >0.05	NS
Anal Itching	03	20.00	02	13.34	01	06.67	x ² =4.66p <0.05	S
Fullness of rectum	10	66.67	02	13.34	08	53.34	x ² =8.57p <0.001	HS
P/R discharge	03	20.00	0	00.00	03	20.0	x ² =3.59 p<0.05	NS

BT-Before treatment, AT-After treatment

When changes in the sign and symptoms compared before and after therapy (difference) in Group I, it was found statistically highly significant in burning pain in anal canal, fullness of rectum, bleeding per rectum and sentinel pile, while in anal itching, it was non-significant. [Table 3]

4. Showing the incidence of symptomatology in group-II

Table 4: Incidence of symptomatology in group-II

Signs & Symptoms	BT (n=15)		AT (n=15)		Difference (BT-AT)		x ² test	
	No.	%	No.	%	No.	%		
Burning Pain	15	100.00	12	80.00	03	20.00	x ² =13.39 p<0.01	HS
Anal Tag	15	100.00	06	40.00	09	60.00	x ² =0.83p >0.05	NS
Bleeding	09	60.00	07	46.67	02	13.34	x ² =0.54p >0.05	NS
Anal itching	05	33.34	04	26.67	01	06.67	x ² =4.66p <0.05	S
Fullness of rectum	06	40.00	05	33.34	01	06.67	x ² =8.57p <0.001	HS
P/R discharge	00	00.00	00	00.00	00	00.0	x ² =3.59 p<0.05	NS

P/R: Per Rectal

When changes in the symptoms compared in Group II before and after therapy, it was found statistically significant in sentinel tag, while in burning pain in anal canal, bleeding per rectum, anal itching and fullness of abdomen was non-significant. [Table 4]

This study shows that there is marked relief in symptoms of fissure in ano.

5. x² tests for comparison of symptoms in both groups after treatment

Table 5: Comparison of symptoms in both groups after treatment

Symptom	Burning Pain	Anal tag	Bleeding	Itching	Fullness of rectum	Per rectal discharge
Value	x ² =0.24	x ² =0.24	x ² =0.60	x ² =0.0	x ² =1.15	x ² =0.24
	p>0.05	p>0.05	p>0.05	p>0.05	p>0.05	p>0.05
	NS	NS	NS	NS	NS	NS

When changes in the symptoms of Group I and II compared, it was found statistically not significant in all symptoms. [Table 5]

6. Showing the incidence of symptomatology at follow ups

Table 4: Incidence of symptomatology at follow ups

Symptom	Group-I					Group-II				
	n	F1		F2		n	F1		F2	
		No.	%	No.	%		No.	%	No.	%
Burning Pain	15	5	66.67	3	07.69	15	9	20.00	8	88.89
Anal tag	15	0	00.00	2	25.00	15	2	28.57	2	100.00
Bleeding P/R	08	3	37.50	1	37.50	12	3	50.00	3	100.00
Anal Itching	03	2	66.67	2	00.00	06	5	16.67	4	80.00
Fullness of abdomen	10	5	66.67	3	00.00	09	2	18.18	2	100.00
Anal discharges	03	2	66.67	0	00.00	01	1	100.00	1	100.00

BT-Before treatment, AT-After treatment, F1- First follow up, F2- Second follow ups

DISCUSSION

Chronic fissure in ano is a common ano-rectal disease Out of multifold problems for the management of this disease, development of recurrence of disease and undesired side effects of modern therapy are common. Keeping these problems in view, *Ayurveda* is needed to be searched for to find out a therapy that is effective and prevents recurrence too. The present study was planned to assess the effect of one such treatment, *Ksharsutra management*, on chronic fissure in ano.

The incidence of diseases was found maximum in *Vata* dominated *Prakrti*, i.e. *Vata-PittajPrakriti*. According to *Ayurveda*, diseases of *guda* (anus) occur due to vitiated *Vata dosha*. So in the present study, this disease was seen in maximum number of patients having *Vata-Pittaj Prakrti* (60% patients). Symptomatic observations showed that *Ksharsutra management* was more effective.

The symptomatology of chronic fissure in ano is mainly due to inflamed and infected anal mucosa. The presence of inflammation and infection in anal canal is due to it being a highly contaminated site. These findings were especially reduced in group I. In Group I, these data suggest that *Ksharsutra management* may be acting by causing

proper drainage of the discharges from wound, apart from promoting wound healing and fibrosis at the site of fissure bed.

The data of present study also showed significant reduction of burning pain in anal canal in Group I, which might be due to improved wound healing.

CONCLUSION

Ksharsutra management reduces the burning pain and itching in anal canal and the fullness of rectum due to chronic fissure in ano. It is also helpful in removing the sentinel tag in chronic fissure in ano. Recurrence of symptoms and sentinel tag in chronic fissure in ano in *Ksharsutra* treated group in the follow up. Thus, *Ksharsutra* management has been found to be more effective in controlling chronic fissure in ano.

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