

## Clinical study to evaluate advantages of 'partial fistulectomy and Ksharsutra ligation' over 'traditional Ksharsutra ligation' in the management of Bhagandar i.e. Fistula in ano

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### Introduction :

Fistula in ano is a disease of anal region, which is associated with recurrent infection with severe pain, which burst itself and relieved temporarily. 'Ksharsutra ligation<sup>1</sup>' is one of the best and proven methods which are included in national health policy. Although Ksharsutra can be performed without use of anesthesia,<sup>3</sup> however, during some studies<sup>4,5</sup> it was difficult to apply Ksharsutra without sedation, hence opted for regional (spinal or caudal) anesthesia during the procedure. Hence with disadvantages like time consuming in longer tracts, pain at the Ksharsutra site during treatment period, pain during Ksharsutra changing, it was difficult to treat patients. Newer method of partial fistulectomy with Ksharsutra ligation<sup>6</sup> was adopted to increase healing rate, to reduce painful weeks, to increase adherence to treatment and to increase cure rate.

### Methods :

Patients attending OPD fulfilling the inclusive and exclusive criteria were selected. The study was completed in two groups 15 patients in each

**Group A** – Ksharsutra Ligation weekly

**Group B** – Partial Fistulectomy followed by Ksharsutra Ligation weekly

Ksharsutra used was 21 coated<sup>1</sup>

भावितं रजनी चूर्णेः स्नुहिक्षीरैः पुनः पुनः ।

बन्धनात् सदृढं सूत्रं छिनत्यर्शो भगंदरम् ॥

चक्रदत्त अर्शोधिकार

(11 Snuhi Kshir, 7 Snuhi kshir and Apamarg Kshar, 3 Snuhi kshir and Haridra on linen barber no 20 thread)

Supplementary treatment for Both Groups

Trifala Guggulu 500 mg twice a day

Chandraprabha Vati 500 mg twice a day

Avipattikar Churna 5 gm at night with warm Water

Sitz Bath with Haridra and warm water

### Parameters of study

Healing rate (cm/week)

Painful weeks (pain during treatment time)

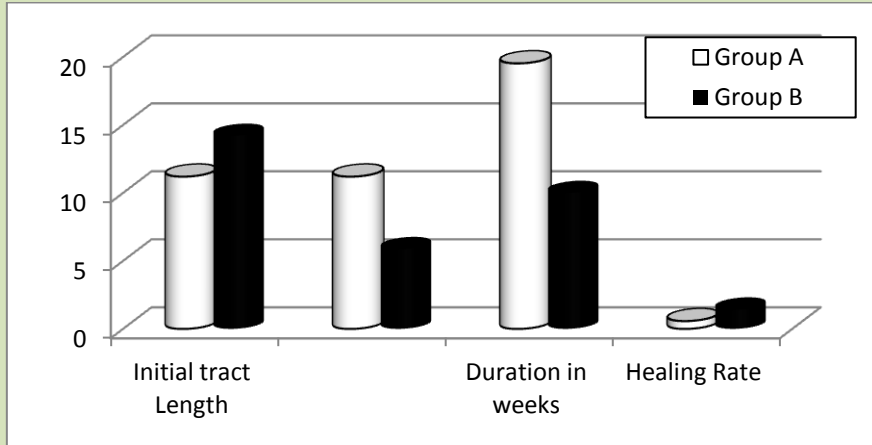
Adherence to treatment

Recurrence up to 1 year

### Results

#### Healing rate (cm/week)

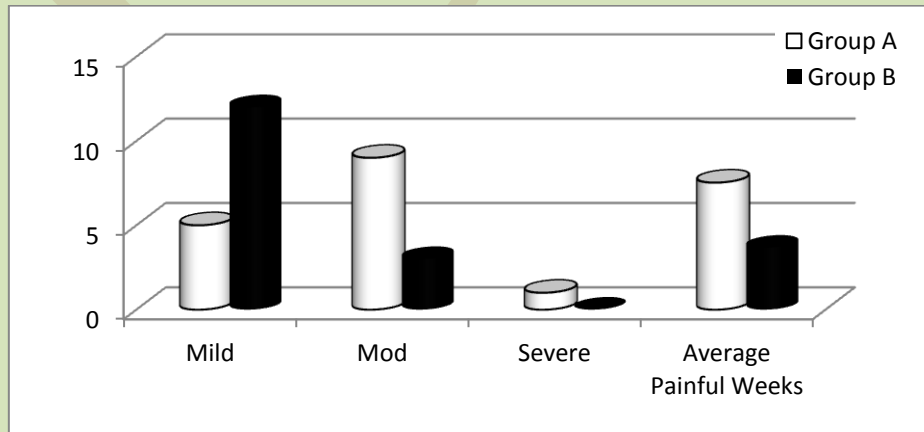
Average	Initial tract Length (cm)	Tract Length of Fistula when t/t start (cm)	Duration in weeks	Healing Rate (cm/week)
<b>Group A</b>	11.2	11.2	19.53	0.57
<b>Group B</b>	14.2	5.86	10	1.42



Healing rate increased by 147.65 %, as maximum tract was removed during partial fistulectomy in Group B i.e. partial fistulectomy with Ksharsutra Ligation

**Table 2 ) Pain during treatment**

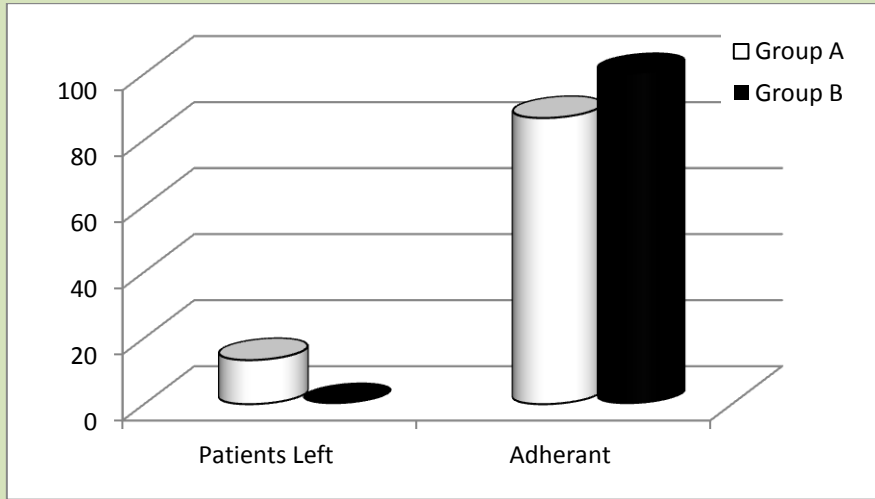
	Mild	Mod	Severe	Average Painful Weeks
<b>Group A</b>	5	9	1	7.53
<b>Group B</b>	12	3	0	3.67



Painful weeks reduced by 51.33 % as tract length and time was reduced in Group B i.e. partial fistulectomy with Ksharsutra Ligation

**Adherence to treatment**

	Patients Left	Adherent	Total	% Adherence
<b>Group A</b>	2	13	15	73.33
<b>Group B</b>	0	15	15	100



Patients Adherence to treatment was increased by 36.36% due to less pain and time in Group B i.e. partial fistulectomy with Ksharsutra Ligation

#### Discussion :

In current study modified Ksharsutra treatment is used to compare with traditional Ksharsutra treatment. Partial fistulectomy was done upto maximum possible and then it was followed by traditional Ksharsutra treatment. Only modification in first surgery was done. Ksharsutra used in both treatments was same. So comparison of both groups was possible.

Fistulous tract length was calculated as length of Ksharsutra ligated. This was measured on removal of previous thread and applying new thread by railroading on measuring scale. Healing rate was calculated by actual fistulous tract

on first follow up divided by total time required to heal. Healing time was improved in group with partial fistulectomy as maximum tract was removed on first day and only redundant tract was underwent Ksharsutra treatment. This ultimately reduced painful weeks and improvement in healing rate.

Pain during treatment is reduced in patient with partial fistulectomy. It may be due to cavity is widened which reduced friction and irritation during treatment.

Adherence to treatment was improved due to less time needed for completion of treatment.

Hence overall partial fistulectomy with Ksharsutra ligation was beneficial over traditional Ksharsutra treatment.

#### Conclusion :

From above observation it was concluded that 'partial fistulectomy with Ksharsutra ligation' is more effective and

have certain advantages in reducing duration of treatment, painful weeks, and increasing adherence to treatment over 'traditional Ksharsutra Ligation'.

Additionally we had sample of fistulous tract to rule out different causes of fistula viz. Tuberculosis etc.

#### References :

- 1) [https://www.nhp.gov.in/kshara-sutra-therapy-medicated-caustic-thread-\\_mtl](https://www.nhp.gov.in/kshara-sutra-therapy-medicated-caustic-thread-_mtl)
- 2) Samhita S. 5th ed. Ch. 17. Varanasi, India: Motilal Banarasi Das; 1975. Chikitsasthanam: Shlokas 29-33; p. 456.
- 3) Deshpande PJ, Sharma KR. Treatment of fistula-in-ano by a new technique. Review and follow-up of 200 cases. Am J Proctol. 1973;24:49–60. [[PubMed](#)]
- 4) Kenji T, Takuji F, Shiqeru T, Mituyoshi S, Shiqemi K, Takakazu K, et al. Treatment of fistula in ano by a medicated thread (Kshara sutra) of chemical curette-review and follow-up study of 182 cases. Drug Deliv Syst. 1992;7:209–15
- 5) Dutta G, Bain J, Ray AK, Dey S, Das N, Das B. Comparing Ksharasutra (Ayurvedic Seton) and open fistulotomy in the management of fistula-in-ano. *Journal of Natural Science, Biology, and Medicine*. 2015;6(2):406-410. doi:10.4103/0976-9668.160022.
- 6) Dr Dixita Bhanderi , Dr Chintan Gamit<sup>2</sup> , Dr Harshit Shah<sup>3</sup> & Dr Vipul Sangani<sup>4</sup> Kharsutra Ligation with Partial FistulectomyAs a Gold Standard Treatment for TransSphincteric Fistula in Ano-A Case Study Imperial Journal of Interdisciplinary Research (IJIR) Vol-3, Issue-2, 2017 ISSN: 2454-1362, <http://www.onlinejournal.in>