

## KSHARASUTRA TRANSFIXATION AND LIGATION IN THE SURGICAL MANAGEMENT OF CHRONIC FISSURE IN-ANO - A CASE REPORT

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### INTRODUCTION

Sushruta mentioned *Kshaarakarma* (Caustic therapy), *Agnikarma* (Heat therapy), and *Raktamokshana* (Blood letting) are parasurgical procedures.<sup>[1]</sup> Among them *Ksharakarma* is the most accepted procedure to treat ano-rectal disorders, under *Ksharakarma* different forms are practiced among them “*Ksharasutra*” (a medicated thread) is useful to fulfil multi therapeutical uses with its pharmacological and surgico-medicament actions. *Ksharasutra* therapy in ano-rectal disorders is appreciated much as compared to other parasurgical modalities. In Ayurveda *Parikartika* resembles to fissure-in-ano of modern parlance which is the most common cause of severe burning pain in anus.<sup>[2]</sup> The etiopathogenesis are most commonly crypto glandular infection according to anal infection theory, trauma due to hard stool results in tearing of anal valves, loss of elasticity due to infection and fibrosis in anal canal due to laxative abuse, incorrectly performed surgical procedures by iatrogenic means and during parturition straining over perianal region.<sup>[3]</sup> Clinical features are burning pain in ano during and after defecation, bleeding per anus in acute fissure, constipation since long duration, Sentinel pile associated with or without anal papilla and reflex symptoms by dysuria and dysmenorrhoea.<sup>[4]</sup> In Ayurveda also symptoms of *Parikartika* are burning

and cutting pain in ano during and after defecation with or without bleeding.<sup>[5]</sup> On inspection linear crack is seen in ano-derm just behind the external skin tag at 6 or 12 o'clock position. [Figure 1] Prevalence of this disease is more at the age of 20 to 40 years, which is more common in males than females. Common presentation of fissure in ano are posteriorly in males while mid anterior in females.<sup>[6]</sup> In Crohn's disease and ulcerative colitis linear fissure seen at lateral side of anus.<sup>[7]</sup> *Virechana-Vyapada* (Complications of *Virechana*), *Basti-Vyapada* and trauma by nozzle during enema results in *Parikartika*.<sup>[8]</sup> In *Vataja Atisara* (Diarrhoea) passage of hard stool giving rise to trauma which leads in to fissure in ano.<sup>[9]</sup> Mainly two mechanisms play an important role in Fissure in ano i.e.-trauma caused by hard stool and narrow passage and fragility of anal canal.<sup>[10]</sup>

### CASE REPORT

A 61 years old 80 kg male patient presented with burning pain in ano since 1 month, feeling of mass in ano since 6 months and constipation since 1 year in OPD of *Shalyatantra* IPGT & RA, hospital, Jamnagar. Patient already having history of white patches all over body resembles leucoderma. No past history of Diabetic Mellitus and Hypertension and no any other

medical or surgical history. Surgeon advised surgery which may be lead to fistula so patient consults to Ayurveda. Local examination showed acute fissure at anterior and posterior aspect of anal canal and associated external sentinel pile at 6 and 12 o' clock position. Per rectal digital examination with lignocaine jelly noted the fissure bed, spasmodic sphincter tone and multiple anal papilla at 3, 7, 9 and 11 o' clock position. Proctoscopy examination also shows big anal papilla at 3, 7, 9 and 11 o' clock position, no evidence of fistula in ano or internal piles. Routine haematological, biochemical and microbiological investigation were carried out and found normal, x ray chest, ultrasonography and Electrocardiography (ECG) were carried out for medical fitness. Vitals of the patient were checked pre-operatively and found that blood pressure 144/80 mm of Hg, pulse 100/min. and respiration 24/min. Under spinal anaesthesia this procedure of *Ksharasutra* application was carried out after Lord's manual anal dilatation.

#### **MATERIAL AND METHODS:**

##### **Method-**

Big internal papilla at 3, 7, 9 and 11 O'clock position (fig.1, 2). Application of *Ksharasutra* was done after incising skin around external pile and separating all the fibres of external sphincter. Same procedure was done in hypertrophied anal papilla at 3, 7, 9 and 11 O'clock position. The extra part of sentinel pile was excised after the *Ksharasutra* transfixation and ligation and wound was dressed after proper haemostasis. After slough out of *Ksharasutra* patient was discharged and follow up for dressing on every alternate day initially and later on weekly.

#### **MANAGEMENT:**

##### **Pre-Operative:**

After taking fitness from the physician evacuation of bowel with soap water enema was done and inj. Tetanus Toxoid 0.5 ml intramuscular and inj. Xylocaine 0.1 ml intradermal as a test dose was given. Written informed consent was taken and under spinal anaesthesia the patient was laid down on operation table in lithotomy position.

##### **Operative Procedure:**

After achieving spinal anaesthesia local painting with betadine solution and draping with sterile cut sheet was done. After Lord's manual anal dilatation proctoscopy was done to visualise internal papilla. The sentinel pile was held with the help of an Allis forceps and transfixed with *Ksharasutra* after releasing from skin at 6 o'clock position. Same procedure was done at 12 o'clock position and over internal papilla. Local dressing was done after achieving haemostasis and shifted to male surgical ward.

##### **Post-Operative Procedure:**

Luke warm water sitz bath along with *Panchwalkal kwatha* (*Vata, Udumbara, Asvatha, Parisha* and *Plaksha*),<sup>[11]</sup> two times a day was advised for 5-10 minute. After that 10 ml *Jatyadi Taila Matra Basti* was given once daily. *Erandbhrishta Haritaki churna* 5 gm with luke warm water was given daily at bed time as laxative.

#### **OBSERVATION AND RESULTS:**

After 7<sup>th</sup> and 14<sup>th</sup> post-operative day wound was healthy and healed between 21<sup>st</sup> to 30<sup>th</sup> post-operative days and also the sphincter was relaxed [Figure 9].

The *Ksharasutra* was slough out on an average 5<sup>th</sup> post-operative day and the wound remained healthy with granulation tissue. No any major complications were noticed during and after the procedure. No recurrence was found after 6 months of follow up and the patient was satisfied by the procedure.

#### **DISCUSSION**

*Ksharasutra* application is used in such a way that it can be carried out a day care procedure as it is a single sitting procedure and the patient can go back home after the procedure.<sup>[12]</sup> Post-operative complications and recurrence rate is negligible and patient can resume duties after removal of *Ksharasutra*. *Jatyadi Taila Matra Basti*,<sup>[13]</sup> sitz bath with *Panchwalkala Kwatha* and bowel regulators were advised and diet explained.<sup>[14]</sup>

Chronic fissure in ano with sentinel tag at 6 and 12 O'clock position (fig. 1, 2) before operation. In this patient *Ksharasutra* transfixation and ligation done at 3, 7, 9 & 11 O'clock position internal papilla (fig 3-6)

during operation. Improvement and wound healing after 14 days (fig-7), after 21 days (fig. 8) and after complete wound healing on 28 days (fig. 9).

Hence *Ksharasutra* ligation are more beneficial than modern surgery because in this method minimal post-operative pain as ligation done after release of sphincter, post-operative bleeding is minimum as the wound is secured from all sides, minimal medicines are required and local treatment is sufficient, also it is a cost effective procedure and no any untoward effects were noted and hence, quality of life improved.

## CONCLUSION

In chronic fissure-in-ano with sentinel pile application of *Ksharasutra* is safe and easy to perform. So that it is a good alternative to surgery as it carries minimum complications and recurrence are almost negligible. Hence, it is a good, cost effective procedure to manage chronic fissure-in-ano (*Parikartika*).

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