



## A unique, minimal application of Ksharasutra (medicated thread) in the management of low anal anterior fistula.

### KEYWORDS

Bhagandara, Fistula in ano, Goodsall's rule, Kshar sutra.

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**ABSTRACT** *Fistula in ano is notorious for its frequent exacerbations, recurrences and its chronic condition and a challenge for the surgeon<sup>1</sup>. The majority of anal fistulae are of crypto-glandular origin, following anorectal abscess in 7-40% of cases. The targets of surgical management are fistula tracts removal, preserving sphincter integrity<sup>2</sup>. Bhagandara (Fistula in Ano) at modern parlance is a common anorectal condition prevalent in the populations worldwide and its prevalence is second highest after Arsha (hemorrhoids). KsharaSutra (K.S.) is one of the chief modality in the treatment of Bhagandarain Ayurvedic science. K.S possesses the action like Chedana, bhedana, lekhana which is proved for scraping the fibrous fistula tract along with healing of wound and preserving the sphincter integrity. In this case the treatment adopted was partial excision (chedana) followed with minimal kshar sutra application to treat anterior low anal fistula which was against Good sall's rule.*

### Introduction

In Sushruta Samhita there is detailed explanation available about Bhagandar (Fistula in ano). The term Bhagandar was coined because it causes dharana (tearing) of Bhaga (Perineum), Basti (Bladder) and guda (Anus). It is considered as difficult for treatment and included under the AshtaMahagada (Eight grave disorders)<sup>3</sup>. Prevalence of fistula in ano as per Indian Proctology Society in a defined population of some states, approx. varied from 17 to 20%<sup>4</sup>. It is the chronic phase of anorectal infection and is characterized by chronic purulent drainage or cyclical pain associated with abscess reaccumulation followed by intermittent spontaneous decompression<sup>5</sup>. Traditional surgical techniques, namely fistulotomy, fistulectomy and seton technique, sever the internal anal sphincters and may damage the external anal sphincters. The recurrent rate of "lay-open" fistulotomy was reported between 2-9 percent<sup>6</sup> with functional impairment ranging from 0 to 17 percent. The use of a seton had a recurrence rate between 0-8 percent. Minor and major incontinence was of 34-64 percent and 2-26 percent, respectively<sup>6</sup>.

The need to combat such critical anorectal problems, a comprehensive approach through Ayurveda with usage of K.S have been extended with definite and a positive outcome. It is simple, safe and effective treatment for anal fistula and it is becoming popular nowadays and universally acceptable. The Apamarga K.S. is well proven to be an effective treatment for fistula in ano and has been standardized by Central Council for Research in Ayurvedic Sciences (CCRAS), an apex research organization of Government of India (GOI) in the field of Indian system of medicine<sup>7</sup>. The Indian Council of Medical Research (ICMR) has validated this unique and effective approach<sup>8</sup>.

In the present case external opening was 5-6 cm away from anal verge in anterior perineum with straight tract. The treatment done was partial excision (Chedana) of tract and minimal application of K.S for remaining tract which was removed after 1 week. Healing was appreciated with scraping of tract and formation of healthy scar was noticed.

### Case report

A 48 year old patient presented with complaints of pus discharge from opening below scrotum with pain during sitting and wetting of undergarments since 1 year. Intermittent swelling and pain in perineal area followed with fever and bursting out with pus discharge and regression of symptoms. Patient was treated with conservative line of management with antibiotics and analgesics at private hospital yet satisfactory results were not obtained. Previous routine blood investigations were normal and the case was diagnosed as fistula in ano with external opening at bottom of scrotum near to the median raphe on left side. The patient approached our hospital with the hope of getting better treatment; there was associated history of constipation but no bleeding per rectum or fever. We didn't find any history of Hypertension, Diabetes mellitus, major illness nor did patient undergo any major surgery in the past, was on antibiotics and anti-inflammatory drugs. Personal history revealed that he was Hindu, vegetarian, married, businessman by occupation with no habits of tobacco and alcohol use.

On general and systemic examination of patient all parameters were stable. Local examination revealed opening in anterior part of perineum at the root of scrotum 1 cm lateral to the median raphe and about 5-6 cm away from anal verge. On Digital examination Internal opening was found at 1'O clock low anal, hard straight fibrous tract (Ruju Granthi Bhagandhar) and tenderness was appreciable in the anterior perineal area which was not according to the Goodsall's rule. Proctoscopic examination described Internal opening found at 1'O clock position with no internal pile mass and malignancy. The patient was advised Avagahasweda (Sitz bath) from Panchavalka Kashaya,, Triphala guggulu 1 tid, Gandhaka Rasayana 1 tid, Avipattikar churna 1/2 tsfd for 7 days with hot water internally. On next visit pus discharge, constipation and tenderness was reduced considerably so the patient was posted for Kshara sutra ligation under spinal Anesthesia after performing all routine Hematological, urinary, Electro cardiogram investigations which were under normal limits. Patient was posted under spinal anesthesia; Foley's self-retaining catheter was intro-

duced into urethra with all aseptic measures. Gentle probing (Eshana) of the tract was meticulously manipulated with palpating the Foley's catheter in situ in order to minimize the risk of injuring the urethra, care was taken not to create false tract (Figure 1). Internal opening was low anal, intersphinctric and at 1'o clock position in anal mucosa with straight fibrous tract. Partial fibrous tract was excised (chedana) 2- 3 cm (Figure 2) from external opening followed with Kshara sutra ligation (Figure 3) and patient was prescribed with prophylactic oral antibiotics for 5 days. K.S was removed in the next follow up of 1 week and Avagahasweda with panchavalka Kashaya was advised for a period of 2 weeks to achieve proper wound healing.

In the observation period of 1 month tract was patent, reduction in discharge, tenderness and softening of fibrous tract (scraping action) was present and patient performed routine activities with less discomfort. The thread was removed in the first follow up of 1 week to hasten the healthy granulation tissue formation and left open without expecting complete cutting of tract, which would take ample amount of time and rather it would be painful during thread changing procedure. The tract was healed completely with minimal contraction and scar formation. The patient follow up was done for a period of 1 year to observe for any recurrence but there was no recurrence.



Figure 1 – Probing of fistulous tract having external opening at base of scrotum



Figure 2- Partial excision (*Chedana*) of tract



Figure 3 – Kshara sutra application for remaining tract

#### Discussion –

Fistula in ano and anorectal sepsis is an established condition described in "Corpus Hippocraticum" in a treatise named "ON- Fistula"<sup>9</sup>. Centuries have passed but the basic principles of management of anorectal sepsis remained the same which revolves around resolution of anorectal sepsis and treatment of fistula without hampering continence. Advent of antibiotics and drainage procedures has led to adequate management of anorectal sepsis but preservation of continence still remains a challenge and efforts are on to achieve an optimal treatment which attains both leading to improvement in patient care.

The patient presented with pain, pus discharge and constipation in the initial stage so Triphala guggulu, Gandhaka rasayan were prescribed with the purpose to combat vata and kapha dosha. Avipattikar churna has vatanulomaka and vibhandahara action which helped in relieving constipation. Partial excision and K.S adopted in the treatment aspect because the tract was long it would take many weeks for healing and repeated changing of thread which is painful condition so 2-3 cm the tract was excised and K.S was applied limited to one week so to scrape and ensure healthy granulation tissue with tract patency. There is no potential space for collection of pus in anterior perineal area so K.S application can be limited to one week for scraping not for complete cutting of the tract. In posterior anal fistula there is risk of collection of pus in ischioanal fossa so there is need of drainage of pus with scraping of fibrous tract. Triphala guggulu and Avipattikar churna was continued for 15 days to reduce pain and constipation.

Goodsall's rule states that if the external opening lies anterior to a line drawn between 3 and 9 o'clock, then the internal opening will be in the anterior quadrant of the anal canal. If the external opening is posterior, then the internal opening will lie in the midline posteriorly. The exception to this rule is where an anterior external opening is associated with a horseshoe and a posterior internal opening<sup>10</sup>. In this case the findings were not as per the above rule, it was having anterior subcutaneous straight tract so partial excision followed with minimal usage of K.S application in order to achieve early recovery and good post operative outcome.

**Conclusion**

Bhagandar(Fistula in ano) treatment is a challenge for the surgeon because of its recurrence and anal incontinence. Anterior low anal fistula can be successfully treated with minimal application of K.Sand limited to scraping of tract, thus by reducing burden of patient in relation with early post operative outcome and painful changing of thread.

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