

Surgical Management of *Bhagandara* by IFTAK Method - A case study

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ABSTRACT:

Perianal abscesses are the most common type of anorectal abscess. It is confined to the perianal region. *Pidaka* or abscess in the perianal region is the premonitory condition if left untreated results in formation of *Bhagandara* or Fistula in Ano. In this case study, IFTAK [Interception of fistulous tract with application of Kshara Sutra] method was used in treating a complex intersphincteric fistula in ano successfully. Though *Ksharsutrat* therapy is big revolution in the field of fistula in ano and numerous studies have lauded its effectiveness, it has some disadvantages like long anxiety period of treatment, severe post-procedural pain, big scar mark. The present study IFTAK minimizes duration of therapy with minimal post operative scar. Hence shows betterment in the consequences of conventional method of Ksharsutra therapy. Here in this case, IFTAK method was used under local anaesthesia. Kshara Sutra was changed upto 5 months. The fistula healed in 6 months. As this was a complex multibranched fistula average cutting and healing period is dependent on various general and local factors. This study revealed an early complete remission of the track by IFTAK method when compared with the Conventional Kshara sutra method. According to the length kshara sutra application takes 40-42 weeks and in this IFTAK technique it was cured in 26 weeks. During follow-up for 120 days no recurrence was noted. Hence IFTAK technique was found very effective due to its comparatively less duration of treatment and minimal scar.

KEYWORDS: Bhagandara, Fistula-In-Ano, fistulotomy, IFTAK, *Ksharsutra*.

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INTRODUCTION:

Pidaka or abscess in the perianal region is the premonitory condition if left untreated results in formation of *Bhagandara* or Fistula in Ano. This information is detailed foremost by *Sushruta*, legendary Father of Indian Surgery. [1-2] In this case study,

administration of IFTAK (Interception of fistulous tract with application of Kshara Sutra) technique was used in treating a complex intersphincteric fistula in Ano successfully. [3] He quote "*Abhinnah Pidaka Bhinnastu Bhagandara*", non-drainage of abscess is the stage of *Pidaka* and once it is

drained it should be treated in lines of Fistula in Ano. [4].

Perianal abscess are the most common type of Anorectal abscess. It is confined to the perianal region. 90% of all Anorectal abscess are caused by non-specific obstruction and subsequent infection of the glandular crypts of the rectum or anus. [5]

Fistula is an usual clinical entity encountered in routine surgical practice and incidence on the surge. 1/3rd of people develop fistula as secondary either to the disease process itself or after surgical drainage of abscess.

IFTAK method in treating a complex intersphincteric fistula in Ano was opted for this case against conventional Ksharasutra method. *Ksharasutra* method is an age old technique wherein linen thread containing *Kshara* [Alkali] is employed for curetting and healing the fistulous tracts. Numerous studies have lauded its effectiveness and with nil recurrence of the clinical entity. [6]

IFTAK (Interception of Fistulous Track and application of *Ksharasutra*) method was employed first in 2000. This method is best suited for multiple tracts or complex fistula involving both the sphincters or horse shoe fistula[7]. In multiple fistulous openings Sushruta opines, *Nadi antarevranankuryat*—a single incision targeted to drain multiple tracks is the basis for developing IFTAK method. The advantage of this technique, it yields less pain scores with negligible scar.

In this case study, multiple fistula tracks with single internal opening intercepted at intersphinctric plane. Here the main culprit, internal opening in infected crypt gland is treated by *Ksharasutra*. By that rest of fistula tracks obliterates and heals properly as the main source of infection has been intercepted by *Ksharasutra*.

CASE REPORT:

A male patient of 30 years with moderately built and nourished body. No history of diabetes mellitus or other systemic illness. Complaining of on & off sever pain near anus associated with fever since 1 year. No pus discharge, no bleeding through anus. He was under oral antibiotics and Non Steroidal Anti Inflammatory Drugs during every attack it. Now complaining of sever throbbing pain associated with fever & chills since 5 days.

On examination suppurative abscess was located at 7` o clock position covering from the anal verge measuring 2cm x1 cm. Skin was intact over abscess and there was no opening externally. On digital examination tender dimpling noted at 6` 0 clock position below dentate line. Sphincter was slightly tight. All other laboratory investigations found within normal limit.

Diagnosis confirmed by MRI of Ano-rectum which showed.

Method of IFTAK:

Informed consent was taken from the patient. After required pre-operative preparation patient made to lie down in lithotomy position. Incision was done on the most dependent part of the abscess. By entering to the abscess cavity all the locules are opened and content was taken out judiciously. Probing was done to assess the fistula track. Curetting done through all the branches of fistula track. Around 2 cm. from distal verge an incision was made at 6` o clock position. By blunt dissection entered intersphinctric space and fistula track was intercepted. The incisional opening of abscess and window created at 6` o clock positions were near to each other. Hence both the openings were made in to a single opening. Dye was injected through the window made at 6`o clock and IFTAK confirmed. Probing was done through

window and taken out from internal opening. *Ksharasutra* placed through this track.

There was no complication seen during and after the treatment. After 4 months of follow-up no recurrence was noted and patient cured completely.

Table-1: TIMELINE AND OUTCOME:

Date	Procedure	Wound Care	Internal Medicine
05/09/2020	I & D of Perianal abscess.	Packing by betadine solution	Kamadhuga Rasa (250 mg tab - two tab two times a day with plain water before food) Cap Grab (Two cap two times a day with plain water after food). Tab <i>Anuloma</i> DS 0-0-2
07/09/2020	Primary threading of fistula tract through the window in 6` O clock position done.	<i>Avagahasweda</i> by <i>PanchavalkalaKwatha</i>	
10/09/2020	Fistula tract cleaned by Sterile water	<i>AvagahaswedabyPanchavalkalaKwatha</i> Packing by <i>Jatyaditaila</i>	<i>Sutashekhara Rasa</i> ^[8] (250 mg tab -two tab two times a day with plain water before food) Cap Ayotic (One Cap three times a day with plain water after food) <i>Ashwagandharishta</i> ^[9] (10 ml twice daily with 20 ml water two times a day after food). <i>Sukha bhediChoorna</i> (2tsp after dinner with hot water)
13/09/2020	Surgical thread replaced by <i>Ksharasutra</i>	<i>Avagahasweda</i> by <i>PanchavalkalaKwatha</i> Packing by <i>Jatyaditaila</i>	<i>Sutashekhara Rasa</i> (250 mg tab - two tab two times a day with plain water before food) Cap Ayotic (One Cap three times a day with plain water after food) <i>Ashwagandharishta</i> (10 ml twice daily with 20 ml water two times a day after food). <i>Sukha bhediChoorna</i> (2tsp after dinner with hot water)
26/09/2020	Window widened and patency was established with right fistula tract and posterior tract.	<i>Avagahasweda</i> by <i>PanchavalkalaKwatha</i> ^[10] Packing by <i>Jatyaditaila</i>	<i>Sutashekhara Rasa</i> (250 mg tab -two tab two times a day with plain water before food) Cap Ayotic (One Cap three times a day with plain water after food) <i>Ashwagandharishta</i> (10 ml twice daily with 20 ml water two times a day after

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			food). <i>Sukha bhediChoorna</i> (2tsp after dinner with hot water)
03/10/2020	<i>Ksharasutra</i> changed Curettage done through tracts.	<i>Avagahasweda</i> by <i>PanchavalkalaKwatha</i> Packing by <i>Jatyaditaila</i>	<i>Sutashekhara Rasa</i> (250 mg tab - two tab two times a day with plain water before food) <i>Cap Ayotic</i> (One Cap three times a day with plain water after food) <i>Ashwagandharishta</i> (10 ml twice daily with 20 ml water two times a day after food). <i>Sukha bhediChoorna</i> (2tsp after dinner with hot water)
07/10/2020	Window widened and curettage done through tracts.		
10/10/2020	<i>Ksharasutra</i> changed Right side fistula tract was probed and ligated by surgical thread.		
15/10/2020	<i>Kshara</i> sutra changed Rt side fistula tract was probed and ligated by surgical thread.		<i>Kamadhuga Rasa</i> (250 mg tab -two tab two times a day with plain water before food) <i>TriphlaGuggulu</i> ^[11] –(Two tab two times a day with plain water after food) <i>Gandhaka Rasa</i> (Two tab two times a day with plain water after food)
31/05/2020	<i>Ksharasutra</i> changed Curettage done		
9/11/2020 18/11/2020 25/11/2020 5/12/2020 15/12/2020	<i>Ksharasutra</i> changed Curettage done		<i>Dhatri Loha</i> ^[12] (Two tab two times a day with plain water after food) <i>Anuloma DS</i> (One tab after dinner) <i>Ashwagandha Rasayana</i> (2tsp two times a day in empty stomach with milk)
22/12/2020	<i>Ksharasutra</i> changed Curettage done		<i>Samayamaka</i> (2tsp two times a day in empty stomach with milk) <i>Dhatri Loha</i> (Two tab two times a day with plain water after food) <i>Anuloma DS</i> (One tab after dinner)

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27/12/2020 5/01/2021			<i>Ashwagandharishta</i> <i>Balarishta</i> (10 ml each twice daily with 20 ml water two times a day after food). <i>Anuloma DS</i> (One tab after dinner) <i>Amruta prashaghrita</i> (2tsp two times a day in empty stomach with milk)
15/01/2021 25/01/2021 10/02/2021 22/02/2021	<i>KsharaSutra</i> changed		<i>Pancha TiktaGhritaGuggulu</i> (Two tab two times a day with plain water after food) <i>Mahatiktaka Ghrita</i> ^[13] (2tsp two times a day in empty stomach with milk) Tab <i>Amla Parimala</i> (Two tab two times a day with plain water after food)
22/02/2021 07/03/2021 17/03/2021	Fistulotomy done	Packing done by <i>Jatyadi Taila</i> ^[14]	



Figure-1: before Treatment



Figure-2:
probing



During Figure-3: After KS in situ

DISCUSSION:

An unique contribution of Ayurveda in the field of fistula treatment is *Ksharasutra* therapy. *Kshara* is a strong alkaline extract of plant. It is anti-inflammatory, anti-slough and also curative in nature. Compared to conventional treatment modalities it is easy daycare procedure and also cost effective. It has minimum rate of complications and has minimal damage to anal sphincter hence no fear of incontinence. Even though in this procedure patient need to visit hospital every week, he can resume his regular activities with minimal pain and other complications. *Ksharasutra* therapy has less recurrence and high success rate. [15]

The innovative IFTAK method seems to overcome few limitations of conventional *Ksharasutra* therapy especially in case of multiple tracks. Here we are supposed to change only one *ksharasutra* in comparison with multiple *ksharasutras* changes in classical *Ksharasutra* therapy. Even pain is comparatively less as there is minimal tissue exposure to *Ksharasutra*.

It is a case of complex fistula with horse shoe track in posterior aspect of anal verge. Along with this there was huge abscess in midline and paramedian region displacing the anal verge and rectum to the left side and ventrally. There were additional ramifications extending even extra-sphinctric and suprasphinctric course. All the tracks along with abscess were dealt with single *Ksharasutra* with the help of curetting. Hence the condition was treated with less pain and minimal scar. Patient was cure in a span of 6 months and there was no recurrence till one year follow-up. *Triphala Guggulu* and *Ashwagandharishta* were given as supportive medicines to manage pain and inflammation.

CONCLUSION:

IFTAK (Interception of Fistulous Track and application of *Ksharasutra*) method seems to be better alternative to conventional *Ksharasutra* method. The key advantage of it is short duration of treatment, less scores of pain and no awkward scar.

LIMITATION OF STUDY:

This is a single case study and it needs systematic clinical studies on large scale samples

INFORMED CONSENT:

The written informed consent has been obtained from patient for treatment and publication of data without disclosing the identity of patient.

REFERENCES:

1. Mir SA, Kumar PH. Bhagandara and its management in Ayurveda: a conceptual study. International Journal of Ayurveda and Pharma Research. 2017 Sep 3.
2. Seow-Choen F, Nicholls RJ. Anal fistula. British Journal of Surgery. 1992 Mar;79(3):197-205.
3. Sherkhane R, Meena P, Hanifa N, Mahanta VD, Gupta SK. IFTAK technique: An advanced Ksharsutra technique for management of fistula in ano. Journal of Ayurveda and Integrative Medicine. 2021 Jan 1;12(1):161-4.
4. Shaikh R, Patel M. Bhagandara: A Review Article on Types of Bhagandara and its Management. International Journal of Ayurveda and Pharma Research. 2022 Apr 30;129-38.
5. Read DR, Abcarian H. A prospective survey of 474 patients with anorectal abscess. Diseases of the colon & rectum. 1979 Nov;22(8):566-8.
6. Ramesh PB. Anal fistula with foot extension—Treated by kshara sutra

- (medicated seton) therapy: A rare case report. *International Journal of Surgery Case Reports*. 2013 Jan 1;4(7):573-6.
7. Dudhamal TS, Maurya S. Management of Recurrent Horseshoe Fistula-in-ano by Ksharasutra. Call for Editorial Board Members. 2021 Jan;14(1):29.
 8. Kumar MS, Ghosh A, Kumar YA, Dileep K, Kumar SA. Kamadugha rasa an effective ayurvedic formulation for peptic ulcer: A review. *Global Journal of Research on Medicinal plants & Indigenous medicine*. 2014;3(1):24.
 9. Shweta M, Shivshankar R, Vaghela DB. Shelf-life evaluation of Laghu Sutashekhar Rasa-a preliminary assessment. *Journal of Ayurveda and integrative medicine*. 2020 Jul 1;11(3):213-6.
 10. Tiwari P, Patel RK. Estimation of total phenolics and flavonoids and antioxidant potential of Ashwagandharishta prepared by traditional and modern methods. *Asian Journal of Pharmaceutical Analysis*. 2013;3(4):147-52.
 11. Palak V, Prajapati PK, Shukla VJ. A Herbal wound healing gel prepared with panchavalka kwatha, nimba kwatha and kumara swarasa with their physicochemical parameters. *Earthjournals.org*. 2013;3(2):49-60.
 12. Gandhi TN, Gupta SN, Patel MV, Kalsariya BD. Pharmaceutico-Analytical Study of Triphala Guggulu. *Journal of Ayurveda and Integrated Medical Sciences*. 2017 Oct 31;2(05):67-71.
 13. Bihari TA, Nitin M, Monika G, Rozy S. Clinical Study to Evaluate the Efficacy of Dhatri Lauha in The Management of Pandu Roga Wsr To Iron Deficiency Anaemia. *IAMJ*: 2016; 4(3): 302-307.
 14. Singh SK, Rajoria K, Sharma S. An ayurvedic approach in the management of Siragatavata complicated with Dusta Vrana. *Journal of Ayurveda and Integrative Medicine*. 2021 Jan 1;12(1):151-5.
 15. Shailajan S, Menon S, Pednekar S, Singh A. Wound healing efficacy of Jatyadi Taila: in vivo evaluation in rat using excision wound model. *Journal of Ethnopharmacology*. 2011 Oct 31;138(1):99-104.
 16. Panigrahi HK, Rani MR, Padhi MM. Clinical Evaluation of Kshara sutra Therapy in the management of Bhagandara (Fistula-in-Ano)-A prospective study. *Ancient Science of Life*. 2009 Jan;28(3):29.
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