A Clinical Case Study Article on The Management of Fistula-In-Ano by Using IFTAK Technique.

Dr. Shraddha Mukir[1], Dr. Amol Padole[2], Dr. Shruti Vijay Sarode[3]
[1]*Second Year PG Student, Department of Shalya Tantra, Government Ayurvedic Medical Collage Nanded, Maharashtra*
[2]*Assistant Professor, Department of Shalya Tantra, Government Ayurvedic Medical Collage & Hospital, Nan, Maharashtra*
[3]*2nd Year PG Shalyatantra Dept. GAC Nanded, Maharashtra*

***Abstract*—Fistula-in-Ano (Bhagandara) is a challenging anorectal disorder marked by chronicity, recurrence, and potential complications like incontinence. Ayurvedic texts classify it among the Ashta Mahagada (eight grave diseases). Ayurveda offers Kshara Sutra therapy as a minimally invasive alternative.**

Case Presentation: A 40 -year-old male presented with a recurrent perianal fistula. He had a history of incision and drainage in 2019 Magnetic resonance imaging (MRI) fistulography identified a trans-sphincteric fistulous tract with the internal opening located at the 6 o'clock position. The patient was successfully managed at our hospital using the minimal invasive ayurvedic IFTAK technique (Interception of Fistulous Tract with Application of Kshara Sutra). Intervention and Outcome: The IFTAK technique involves identifying the fistulous tract and creating a controlled window at the inter sphincteric plane. Through this window, the tract was intercepted, and a medicated Kshara Sutra (alkaline seton) is selectively applied to the remaining portion of the tract. Postoperative management included weekly replacement of the medicated thread, sitz baths, local application of Jatyadi Taila, and administration of oral Ayurvedic medications. Complete healing of the fistulous tract was achieved within five weeks. No recurrence or postoperative complications were observed during an 18-month follow-up period. Conclusion: The IFTAK technique, when integrated with Ayurvedic interventions, provides a safe and effective approach for the management of complex or recalcitrant fistula-in-Ano. This sphincter-conserving method is associated with reduced postoperative pain, promoting controlled healing and drainage, lower recurrence rates, and shorter hospital stays. Further studies are recommended to establish its broader clinical utility.

***Index Terms*—IFTAK, Bhagandar, Complex fistula-in-ano, Kshara Sutra.**

I. INTRODUCTION

Fistula-in-Ano (Bhagandara) is a commonly encountered anorectal disorder characterized by an unhealthy granulated track develops between the anorectal and perianal skin. It is often associated with persistent discharge of blood-stained or purulent material, pain with significant impairment in quality of life. In the general population the prevalence rate of fistula in Ano is 0.01%. From an Ayurvedic perspective, disease that causes Darana (deformity) in and around the Bhaga (pubic region, perineum, vaginal region, and genital area), Guda (anal region), and Basti (urinary bladder) is called Bhagandara. An unripe or non-suppurated abscess is termed as Pidaka, whereas once it becomes suppurated and forms a tract, it is identified as Bhagandara. It is described as one of the Ashta Mahagadas (eight grave diseases) due to its chronicity, recurrence, and the complexity of its management.

Conventional surgical procedures such as fistulectomy, fistulotomy, and ligation of inter-sphincteric fistula tract (LIFT), fibrin glues, advancement flaps, and expanded adipose derived stem cells (ASCs) though widely practiced, are often associated with drawbacks including longer healing time, higher chances of recurrence, and potential risk of incontinence. In Ayurveda, the Kshara Sutra therapy has been extensively documented as a safe, minimally invasive, and effective para-surgical measure for managing Bhagandara, offering controlled cutting, debridement, and simultaneous healing of the fistulous tract with minimal complications.

In recent years, modified techniques such as IFTAK (Interception of Fistulous Track with Application of Kshara Sutra) and MIKST (Minimal invasive Kshara Sutra technique) have been introduced to address high or complex fistulous tracts while preserving continence and reducing recurrence with minimum healing time. IFTAK technique integrates the classical Kshara Sutra principle with an innovative approach to minimize patient morbidity and hospital stay.

This case report highlights a presentation of Bhagandara characterized by chronic symptoms and a high chance of recurrence commonly associated with conventional surgical approaches. It was managed successfully with the IFTAK technique using Kshara Sutra. Most of the fistulas are due to glandular infection of anal crypts located in intersphicteric space. Managing theory for fistula-in-Ano is based on destroying the infected crypt may cure the fistula in Ano and rest of track was healing by itself. IFTAK technique work on this theory. So, this case highlights the clinical outcomes, healing process, and long-term follow-up, emphasizing the effectiveness of this integrative Ayurvedic approach in the management of Bhagandara.

II. CASE REPORT

A 40-year-old male presented to the OPD of shalyatantra in government Ayurvedic medical college and Hospital nanded, Maharashtra with complaints of swelling and a boil present in the right perineal region for the past two months. The patient reported spontaneous burst of boil with intermittent discharge of blood-mixed pus from a perineal boil. He experienced discomfort and pain during defecation, along with occasional itching in the affected area.

Past History

The patient had no notable past medical history or underlying systemic conditions. There was no known family history of similar conditions. The patient has a surgical history of undergoing incision and drainage (I&D) for an anorectal abscess seven years ago (2019)

Personal History

The patient reports a history of constipation, with regular bladder habits. Sleep quality is inadequate, and appetite is also insufficient. There is history of alcohol addictions two months back.

Clinical Examination

General Examination

On general examination, the patient weighed 58kg with a blood pressure reading of 130/86 mm Hg, indicating a normal range. The other vitals were also recorded within normal physiological ranges. The patient's body temperature was afebrile, suggesting the absence of fever at the time of assessment. On systemic examination no abnormality detected. Patient is conscious and well oriented to time, person and place.

Local Examination

On Inspection, a single external opening at 8 o' clock position, approx 6cm from anal verge was observed in the right perianal region, with mild erythema and induration around the site. There was evidence of intermittent discharge with slight pus mixed with blood, indicating the presence of an active fistulous tract shown in [Figure 1]. Surrounding skin appeared slightly thickened, and there was no sign of spontaneous healing.

On palpation, mild induration was noted around the external opening, with mild tenderness upon applying pressure to the affected area. A cord-like structure, indicative of a fistulous tract, could be palpated extending towards the anal canal. No fluctuation was observed. There was mild warmth over the area, suggesting local inflammation. No other masses or abnormalities were detected in the surrounding tissues. On Digital rectal examination sphincter tone was normal. An external opening was identified at 8'o clock position, approximately 6cm from anal verge. Internal tender dimpling was noted at 6'oclock below dentate line with mild tenderness. Proctoscopy findings were unremarkable, ruling out any internal hemorrhoids or mucosal abnormalities.

Diagnostic Assessment

Further evaluation was done with an MRI fistulogram to confirm the diagnosis of fistula with a single tract extending from the anal canal to the external opening. MRI fistulogram suggestive of Fistula in Ano, with linear fluid singal intensity area with T2W/STIR hyper intensity noted in right perianal region ascends antero-superiorly/postero-superiorly with internal opening at '6'o clock position in anal canal through transphinteric course just below levator ani with length of tract 5.7cm.

Other preoperative routine investigation was done. All reports are within normal limits.
Timeline: Timeline of the patient visits and surgical procedure and follow-ups demonstrated in Table no.1.

Therapeutic Intervention
The patient was treated with Kshara Sutra therapy using the IFTAK technique.

Pre-procedure
The patient was counseled about the procedure, its benefits, and the expected outcomes. After obtaining informed consent, he was admitted for surgical intervention. All routine pre-surgical investigations were done.

Procedure
- After getting all vitals and investigation within normal limits.
- Patient shifted to OT table and kept in lithotomy position. The procedure was performed under local anesthesia.
- After coming the effect of local anesthesia, probing was done which revealed communication between the external and internal openings from 8 to 6 o'clock positions, respectively.
- IFTAK was done i.e. A window is created at 6'o clock position to intercept to fistulous tract at intersphincteric space where infected anal glands followed by Kshara Sutra application between created window and internal opening at 6'o clock position.
- Complete homeostasis was achieved.
- Aseptic dressing was done at created window at 6'o clock position.

Post-procedure
- Patient was instructed on self–care measures include hot sitz bath with Tankan Bhasma was advised after defecation and wound hygiene.
- Dressing with Jatyadi Taila was advised
- Changing weekly Kshara Sutra was advised.

Oral Medication advised
1. Triphala Guggulu: 2 tablets twice daily for 15 days.
2. Abhyarishta: 20ml twice daily after meals.
3. Haritaki Churna: 4gm at bedtime with lukewarm water.
4. Isabgol Husk: 3 tsp at bedtime with lukewarm water.

Follow-Up and Outcomes: See [Figure 2, 3, 4, 5 & 6] Kshara Sutra changing was advised on weekly follow-ups. The discharge from external opening completely dried up on post operative 3rd or 4th day. There was a fluent pus discharge seen from artificial created window. Discharge from window was gradually disappearing after two weeks. Pain was also reduced in first week and completed relieved after two weeks. After two weeks healthy granulation was seen in the operative site wound followed by regular dressing and weekly Kshara Sutra changing for 4 weeks. There was a spontaneous cut through was done after 4 weeks and complete healing was achieved after 10 days with minimal scar.

Regular four follow-ups were conducted. First two follow up was done after complete wound healing with the interval of 15 days. Third follow up was done after one month of second follow-up. Final fourth follow-up done after 1 year of last follow up. No recurrence or any complication was observed during follow-ups and patient's quality of life improved.



Figure: 1 Pre-operative Image



Figure: 2 Second Week Follow Up



Figure: 3 Third week Follow Up



Figure: 4 Fourth week Follow Up



Figure: 5 After Cut through



Figure: 6 Completely Healed

Date	Event / Intervention	Outcome / Remarks
29-05-2026	Patient, a 40-year-old male, presented to OPD with complaints of swelling in the right perianal region for 2 months, intermittent blood-mixed pus discharge, discomfort, pain during defecation, and occasional itching.	Diagnosed as Fistula-in-Ano (Bhagandara) after clinical examination and proctoscopic evaluation.
30- 05 - 2026	Patient admitted and underwent IFTAK (Interception of Fistulous Track with Application of Kshara Sutra) technique under local anesthesia.	Procedure well tolerated. Apamarga Kshara Sutra applied.
Weekly (7-June 2026 - 14, 21 June - 2026, 28 June 2026	Weekly Kshara Sutra changes performed for 4 weeks.	Progressive cutting and healing observed at each sitting. There was a fluent pus discharge seen from artificial created window in the first week. Discharge reduced gradually after two weeks. Pain was also reduced in first week and completed relieved after two weeks. After two weeks healthy granulation was seen in the operative site wound followed regular dressing and weekly Kshara Sutra changing for 4 weeks.
4 July 2026	Spontaneous cut-through was done.	Wound healthy. No discharge seen with healthy granulation
15 July 2026	No any complaints	Complete healing was achieved after 10 days with minimal scar.

2 August 2026 (1st Follow-up)	15 days after healing.	No pain or discomfort, wound site healthy.
2 September 2026 (2nd Follow-up)	One month after 1st follow-up.	Maintained healing, no recurrence, and patient asymptomatic.
2nd 0ctober 2026(3rd Follow-up)	1 month after 2nd follow-up.	Stable condition, no signs of recurrence. Patient advised for long-term follow-up.
November 2026 (4th Follow-up)	1 year after 3rd follow-up.	No recurrence recorded. Patient remained symptom free with normal bowel habits. Patient quality of life improved.

III. DISCUSSION

Discussion on IFTAK technique

The management of fistula-in-Ano has traditionally posed a challenge due to the risk of recurrence and potential damage to the anal sphincters, which can result in fecal incontinence. Conventional treatments, such as fistulotomy, seton placement, and more recently, laser and other advanced surgical techniques, carry the risk of compromising sphincter integrity, especially in complex and recurrent cases.

The Ayurvedic approach, particularly the Ksharasutra therapy, a minimal invasive surgical procedure, employs a specially medicated thread made from linen coated with herbal alkalis and agents possessing anti-inflammatory and debriding properties. Kshara sutra facilitates simultaneous cutting, debridement, and healing of the fistulous tract.

The chemical and mechanical action of the thread allows for effective curettage of the epithelial lining, while also promoting drainage and tissue regeneration. Despite its advantages, Ksharasutra therapy is not without limitations. Some patients experience discomfort, post-procedural pain, a longer treatment period, repeated hospital visits, and noticeable postoperative scarring, factors that may result in reduced compliance and lower acceptance rates.

To overcome these drawbacks, the IFTAK (Interception of Fistulous Tract and Application of Ksharasutra) technique has been introduced as an innovative advancement. This modified method reduces the overall length of the fistulous tract by intercepting it at intersphinteric space closer to the internal opening, thereby eliminating the need to treat any unnecessary curved extensions. As a result, there is significantly less tissue exposure, leading to a marked reduction in pain and discomfort during thread changes, unlike in the conventional approach where the entire tract is exposed along its axis.

In the present case, IFTAK technique resulted in faster healing while minimizing damage to the surrounding healthy tissue, minimal postoperative scarring, minimal hospital stays and significantly less pain. Despite the complexity of the case, IFTAK technique facilitated complete healing within 5 weeks and no recurrence was observed during the 18 months follow-up period.

However, careful patient selection, precise diagnosis, and thorough preoperative imaging are essential to ensure the successful application of this technique. Any failure in identifying the primary crypt or addressing associated sepsis may lead to non-healing or recurrence. In the present case, the use of MRI for preoperative evaluation provided critical insights into the anatomy of the fistula, allowing for appropriate planning of the IFTAK procedure.

Discussion on Jatyadi Taila, Triphala Guggulu and Abhyaristha

The use of Jatyadi Taila in dressing the wound also played a vital role in drying of exudates, Lekhana (scraping) of unhealthy tissues, promoting healing and preventing infection by the virtue of Tikta Kasaya Rasa properties. Triphala Guggulu, administered as part of the oral medication, acted as an anti-inflammatory, analgesic and antimicrobial agent, further supporting the healing process.[10] The chief ingredient of Abhyaristha is Amalaki, Haritaki, Indaravaruni and Kapittha which helped maintain regular bowel movements, reducing strain on the healing tissues by enhancing digestive fire or metabolism.

IV. CONCLUSION

The IFTAK technique, when combined with appropriate Ayurvedic interventions, offers a promising, sphincter-preserving alternative for the management of complex fistula-in-Ano. This approach minimizes tissue trauma, reduces postoperative pain, shortens healing time, and enhances patient compliance compared to conventional Ksharasutra therapy. In the present case, the integration of IFTAK with adjuvant Ayurvedic measures such as Jatyadi Taila for local wound care and Triphala Guggulu with Abhyarista for systemic support resulted in complete healing within five weeks with no recurrence at
18-month follow-up. These findings highlight the potential of combining minimally invasive surgical innovation with traditional Ayurvedic pharmacopeia to achieve optimal outcomes in fistula management. However, larger studies with longer follow-up are warranted to further validate these results.

ACKNOWLEDGEMENTS

We extend our sincere gratitude to our patient for providing informed consent to share his case for academic and scientific purposes. We are also deeply thankful to our institute and our mentors for their invaluable guidance and unwavering support throughout the preparation and publication of this case report.

REFERENCES

[1] P. R. O'Connell, A. W. M. McCaskie, and R. D. Sayers, *Bailey & Love's Short Practice of Surgery*, vol. 2, 28th ed., pt. 11, ch. 80, 2023, p. 1436.

[2] P. Sreenadh, V. Mahanta, R. Sherkhane, and S. K. Gupta, "Management of Riju Bhagandara (trans-sphincteric anal fistula) by modified conventional Ksharasutra therapy," *Journal of Ayurveda Case Reports*, vol. 3, no. 1, Jan.–Mar. 2020, doi: 10.4103/JACR.JACR_6_20.

[3] K. K. Thakrala, *Sushruta Samhita of Sushruta*, ed. with *Nibandha Sangraha* by Acharya Dalhana, Hindi commentary, pt. 1, 2014 ed. Varanasi, India: Chaukhambha Sanskrit Sansthan, Nidana Sthana, ch. 4, verse 3, p. 737.

[4] A. Shastri, *Sushruta Samhita of Sushruta*, ed. with *Ayurveda-Tattva-Sandipika* Hindi commentary, pt. 1, Sutra Sthana, Avaraniya Adhyaya, ch. 33, verses 4–6. Varanasi, India: Chowkhambha Sanskrit Sansthan, reprint 2021, p. 163.

[5] R. Sherkhane, P. Meena, N. Hanifa, V. D. Mahanta, and S. K. Gupta, "IFTAK technique: An advanced Ksharsutra technique for management of fistula in ano," *Journal of Ayurveda and Integrative Medicine*, vol. 12, no. 1, pp. 161–164, 2021, doi: 10.1016/j.jaim.2020.06.005.

[6] A. Kumar, P. K. Hemantha, and N. Singh, "Multiple stage surgical approach along with Ksharasutra therapy in the management of high anal fistula (Bhagandara)," *Journal of Research in Traditional Medicine*, vol. 2, no. 2, pp. 51–53, 2016. [Online]. Available: https://www.researchgate.net/publication/325673262

[7] A. K. Pandey, S. Katkar, R. S., N. Parmar, K. T. A., A. K. Dwivedi, and R. Sherkhane, "IFTAK (Interception of Fistulous Tract with Application of Ksharasutra) technique: A minimally invasive solution for recurrent fistula-in-ano—a case series analysis," *International Journal of Colorectal Disease*, vol. 40, no. 1, Art. no. 155, Jul. 11, 2025, doi: 10.1007/s00384-025-04900-2. PMID: 40646373; PMCID: PMC12254057.

[8] P. Hemantha Kumar and N. Hanifa, "Minimal invasive Kshara Sutra technique (MIKST) for the treatment of trans-sphincteric anal fistula—a single-center retrospective study in India," *Annals of Medicine & Surgery*, vol. 87, no. 3, pp. 1146–1152, Mar. 2025, doi: 10.1097/MS9.0000000000003048.

[9] K. T. Aadithyaraj, R. Sherkhane, A. K. Pandey, S. Solanki, and S. Katkar, "IFTAK technique for management of anterior fistulae in ano in female patients—a case series," *Journal of Ayurveda and Integrative Medicine*, vol. 16, no. 5, Art. no. 101170, Jul. 25, 2025, doi: 10.1016/j.jaim.2025.101170. PMID: 40714567.

[10] A. K. Pandey, S. Katkar, R. S., N. Parmar, K. T. A., A. K. Dwivedi, and R. Sherkhane, "IFTAK (Interception of Fistulous Tract with Application of Ksharasutra) technique: A minimally invasive solution for recurrent fistula-in-ano—a case series

analysis," *International Journal of Colorectal Disease*, vol. 40, no. 1, Art. no. 155, Jul. 11, 2025, doi: 10.1007/s00384-025-04900-2. PMID: 40646373; PMCID: PMC12254057.

[11] *Bhaisajya Ratnavali*, ed. with Hindi commentary by Kaviraj Shree Ambika Dutta Shastri, 2021 ed. Varanasi, India: Chaukhambha Prakashan, Arshoroga Chikitsa Prakarana, verses 175–180, p. 316.