A Journey through Persistence: A Case Study on Treating Chronic Perianal Fistula with Kshara Sutra Application

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ABSTRACT
Objective: In this case study, an Ayurvedic medical approach called Kshara Sutra treatment is used to treat a chronic transsphincteric fistula in a 45-year-old male patient after three unsuccessful surgical operations.

Methods: The patient has been experiencing peri-anal pain and discharge on and off for six years. An extensive diagnostic examination, which included an MRI fistulogram, revealed a transsphincteric fistula with several external openings on the left buttock and one internal hole at 6 o'clock. Following methylene blue infiltration confirmation of the interior orifice, Kshara Sutra therapy was applied.

Results: The patient responded well to Kshara Sutra therapy, showing significant improvement in pain and discharge as well as no significant side effects. At the conclusion of the therapeutic time, the fistula was seen to have fully resolved, and the patient has since been symptom-free.

Conclusions: This instance highlights the Kshara Sutra therapy's potential efficacy in treating persistent transsphincteric fistulas, especially when other treatments have failed. It is necessary to conduct more study to confirm these conclusions and examine the wider Applications of this therapy for the treatment of fistulas.

KEYWORDS: Transsphincteric Fistula; Kshara Sutra Therapy; Persistent Fistula; Alternative Treatment; Case Study.

INTRODUCTION
Anorectal abscesses frequently cause anal fistulas, a problematic disease marked by persistent, aberrant connection between the epithelialized surface of the anal canal and the perianal skin (1). A particular subtype, the transsphincteric fistula, has been identified as being particularly difficult to treat and having a high rate of recurrence after conventional surgery. It crosses both the internal and external anal sphincters (2). This case study describes a 45-year-old man without diabetes or high blood pressure who had a chronic transsphincteric fistula that had defied many surgical procedures over a six-year period. Kshara Sutra, a therapy approach from traditional Indian medicine's early days, was used with great effectiveness. A medicinal thread is applied to the fistula tract as part of the Kshara Sutra therapy, which gradually cuts, curettes, and heals the tract (3). This report's goal is to draw attention to the possibility of Kshara Sutra therapy as a successful modality for treating persistent transsphincteric fistula, particularly in situations when traditional surgical approaches have failed. This case study offers a thorough analysis of the patient's troubled medical past, which was marked by lingering symptoms and unsuccessful treatment attempts. Six years of continuous pain in the perianal area with discharge from an external thigh orifice were experienced by the patient. Despite three prior surgeries, the transsphincteric fistula persisted and was challenging to treat with conventional techniques. This highlights how problematic these fistulas are, which are difficult to cure due to their position and risk of incontinence (4). Numerous operations failing also highlights the possibility of recurrence and the need for various treatment approaches. The investigation methods used to find the internal fistula opening and confirm the diagnosis are then described in the case study. Special investigations were conducted to rule out any specific abnormalities. The transsphincteric fistula, which had many outside holes on the left buttock and an inner hole at 6 o'clock, was located using an MRI fistulogram. This imaging technology has proven to be an effective way to recognise the architecture of fistulas and make diagnoses, making it crucial for surgical planning (5). The case study goes on to detail the Kshara Sutra therapy,
which was selected because the condition was recurring and conventional surgical methods had failed. It is discussed in full how the treatment was carried out, including the use of the Kshara Sutra, track interception, and methylene blue penetration. This is in keeping with the therapeutic method described in the literature, which involves inserting a medicinal thread into the fistula tract that progressively functions to cut, curette, and mend the tract (6). By closely analysing the outcomes of this therapeutic approach, the case study reveals insights into the potential of Kshara Sutra therapy as a treatment method for transsphincteric fistulas. This therapy, which has origins in ancient Indian traditional medicine, offers a good alternative, especially for patients who have not had success with more conventional treatments.

CASE PRESENTATION

Patient's Background
The patient is a 45-year-old male who has never had diabetes or high blood pressure. He claims not to have had TB or inflammatory bowel disease and is a student (IBD).

Initial Symptoms
The patient, who had been experiencing persistent pain and recurring discharge from the perianal area for the previous six years, arrived with his condition. Additionally, a discharge was observed coming from a thigh show's exterior entrance (figure 1).

![Figure 1: patient with chronic pain and recurrent discharge from the perianal region.](image)

Past Interventions
The patient's symptoms remained despite three surgical procedures meant to fix the problem. Although the procedures originally appeared to be effective, they were unable to give a long-term solution, which caused the patient's symptoms to return and their quality of life to decline.

Current Presentation
Because of the patient's ongoing problems, more research and a different treatment plan were required. His daily life had been considerably impacted by the ongoing pain and discharge, which necessitated a more permanent fix.

Physical Examination
Physical examination revealed a left buttock external opening with signs of an active discharge. A second opening in the area of the thigh was discovered after further inspection. On the general and systemic examination, there were no more abnormalities found (figure 2).
Medical Decision
It was determined to use a different therapeutic strategy because the problem was recurring and prior surgical procedures had failed. The decision was made to pursue Kshara Sutra therapy, an illustrious form of traditional Indian medicine that has a reputation for being successful in treating complicated and recurrent fistulas. The severity and persistence of the patient's disease, as well as the failure of earlier treatments, must all be established in this phase of the case study in order to support the choice to try an alternative therapy like Kshara Sutra.

Diagnostic Assessment

Initial Assessment
Initial clinical testing supported the patient's complaints of persistent discharge and chronic pain. Multiple external holes were found during a physical examination in the left buttock and thigh area.

Advanced Imaging
An MRI fistulogram was done in order to precisely map the fistula and gauge its intricacy. This imaging method is thought to be very efficient at identifying and describing the anatomy of fistulas (6). The MRI fistulogram showed a transsphincteric fistula with many exterior openings on the left buttock and an internal hole at 6 o'clock.

Ruling Out Other Diseases
It was vital to rule out any other particular disorders that could be causing the fistula to remain given the patient's recurrent type of illness and the failure of prior therapies. Special studies were carried out, including tissue biopsies from the fistula tract and blood tests. Any significant illness that would have caused the recurrent fistula was not found, according to the results.

Confirming the Diagnosis
The patient's symptoms, medical history, and the results of the MRI all supported the diagnosis of a chronic transsphincteric fistula. The track was stopped here for additional treatment after the internal opening at 6 o'clock was discovered. This step of the diagnostic evaluation emphasises the significance of a thorough and precise diagnosis in the management of challenging cases such persistent transsphincteric fistula. The particular investigations and imaging techniques employed not only validated the diagnosis, but also gave a clear outline for the treatment intervention.
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Methylene Blue Infiltration
A methylene blue infiltration was carried out from the external openings to validate the internal opening at the 6 o'clock position found in the MRI. This treatment confirmed the internal hole and helped visualise the fistula tract in its entirety.

Final Diagnosis
The ultimate diagnosis was verified as a chronic transsphincteric fistula with a single internal opening at the 6 o'clock position and several exterior openings thanks to sophisticated imaging, specialised examinations, and methylene blue infiltration. The history of recurring symptoms and the failure of earlier surgical procedures served to further corroborate the diagnosis.

Treatment Decision
The ultimate diagnosis was verified as a chronic transsphincteric fistula with a single internal opening at the 6 o'clock position and several exterior openings thanks to sophisticated imaging, specialised examinations, and methylene blue infiltration. The history of recurring symptoms and the failure of earlier surgical procedures served to further corroborate the diagnosis.

Therapeutic Intervention

Preparation for Kshara Sutra Therapy
Kshara Sutra treatment, a long-standing traditional Indian medical procedure, was prepared for the patient. A medicinal thread is applied to the fistula tract as part of this therapy, and it gradually slices, curettes, and heals the tract.

Methylene Blue Infiltration
Methylene blue was injected through the external apertures as part of the therapeutic technique to verify the internal opening. This made it easier to see the whole fistula tract, allowing for proper placement of the Kshara Sutra and retrograde probing (show figure 3).

![Figure 3: methylene blue infiltration from the external openings to confirm the internal opening](image)

Track Interception
The interior aperture at 6 o'clock was where the fistula track was stopped. The efficacy of the therapy depended on this interception, which allowed the Kshara Sutra to be placed precisely.

Kshara Sutra Application
The Kshara Sutra, a medicinal thread, was then administered from the wound where it was intercepted to the interior orifice. To guarantee that the Kshara Sutra is applied appropriately along the fistula tract, it must be applied carefully and with great precision (show figure 4,5).
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Figure 4: Retrograde probing

Figure 5: Window is packed with gauze material soaked with normal saline every alternate day until the distal track collapsed

Post-Procedure Care
The Kshara Sutra was applied, and then the distal tracks were properly cleaned and curetted. The patient was constantly observed for any indications of problems or negative reactions, and regular dressing changes were performed.

Follow-Up and Monitoring
It was planned to do routine follow-ups to keep an eye on the healing process and to control the Kshara Sutra as it gradually cut, curtailed, and healed the fistula tract. The patient was given instructions on how to care for the wound at home and was informed of the warning signs and symptoms that called for emergency medical assistance.

The management of the persistent transsphincteric fistula depended heavily on this therapeutic intervention phase. The Kshara Sutra therapy was successfully implemented thanks to careful application and ongoing observation, which significantly improved the patient's symptoms and quality of life. The situation also demonstrates how crucial post-procedure care and follow-up are in the management of such challenging cases.

Follow-Up and Outcomes
Patient's Response to Therapy
The Kshara Sutra therapy had a positive effect on the patient. Within the first two weeks after the treatment, he noted a progressive decrease in pain and discharge. Over time, his symptoms got better and better, greatly improving his quality of life.
Complications or Side-Effects
During the course of the therapy, no serious issues or adverse effects were recorded. Minor discomfort related with the Kshara Sutra was addressed adequately with over-the-counter pain medicines. A close eye was kept on the patient for any indications of infection or unfavourable reactions, but none were found.

Progress of Healing
Regular check-ups showed that the fistula tract was gradually mending. During the follow-up appointments, the Kshara Sutra was routinely adjusted and replaced as needed as it gradually sliced, curetted, and repaired the tract.

Final Outcome
The patient had no symptoms at all after the course of medication. The fistula tract has fully recovered when the pain and drainage stopped. His condition had much improved compared to before receiving Kshara Sutra therapy (show figure 6, 7).

Current Status of the Patient
Since the treatment was finished, the patient has continued to be symptom-free. He is still routinely checked to make sure the fistula has not returned. The patient's quality of life has significantly improved as a result of the treatment's success, and he is now free to resume his regular activities.
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The success of this instance highlights the Kshara Sutra therapy's potential effectiveness in treating difficult and persistent transsphincteric fistulas. For patients who have experienced failure with traditional treatments, this therapy may offer an alternate course of action.

DISCUSSION

Analysis of the Case in the Context of Existing Literature

The Kshara Sutra therapy used in this case to treat a persistent transsphincteric fistula is consistent with the results of several other research. Kshara Sutra therapy has been demonstrated to be useful in controlling fistula-in-ano, especially in cases where conventional treatments have failed (5,7). Our case's good outcome, which was characterised by total symptom relief and the absence of significant sequelae, is consistent with prior reports. Additionally, the increase in the patient's quality of life supports Singh et al findings, which showed a significant improvement in patient-reported outcomes after Kshara Sutra therapy (8, 9).

Comparison of Kshara Sutra Therapy with Conventional Treatments

Despite being typically successful, traditional surgical procedures for fistula-in-ano can occasionally cause recurrence, as was the case in this instance. Concern has also been raised about the possibility of incontinence after surgical procedures (9). Using the other hand, research on Kshara Sutra therapy have revealed encouraging results in terms of both efficacy and safety, with low recurrence rates and little danger of incontinence (5, 10). This shows that Kshara Sutra therapy might be an effective substitute for patients with complicated or recurrent fistulas, especially if other therapies haven’t worked.

Implications of the Case for Future Management of Similar Cases

The positive result in this case indicates that Kshara Sutra therapy may be a useful method for treating persistent transsphincteric fistulas. It emphasises how crucial it is to take into account alternative therapies when trying to recover from a failed conventional treatment. This example also emphasises the need for a thorough diagnostic evaluation to direct the treatment plan and the significance of meticulous post-procedure care and follow-up to guarantee positive results.

This example contributes to the expanding body of research that shows Kshara Sutra therapy is effective for treating complex and persistent fistulas. To further demonstrate the efficacy and safety profile of this therapy and to better understand its potential function in the broader context of fistula management, future research should attempt to undertake bigger, controlled trials.

Future Directions in Management of Persistent Transsphincteric Fistulas

This example highlights the potential importance of Kshara Sutra therapy in the treatment of persistent transsphincteric fistulas, particularly when other surgical options have been unsuccessful. It offers strong justification for a wider acceptance of these conventional treatments in clinical settings. Larger, randomised controlled trials should be conducted in the future to develop uniform guidelines for the application of Kshara Sutra therapy in these situations. This would enable a more thorough evaluation of its long-term effectiveness, safety, and recurrence risk (6).

Patient-Centered Care

The value of patient-centered treatment should be another important lesson learned from this situation. After the therapy, the patient's quality of life greatly increased, highlighting the importance to consider the patient's unique experiences and worries when choosing a treatment strategy. When assessing the efficacy of a treatment, clinical and patient-reported outcomes should be taken into account (7,11).

Multidisciplinary Approach and Collaboration

The effective treatment of this case of recurrent transsphincteric fistula shows the benefits of multidisciplinary thinking and teamwork among medical experts. The team was able to create a successful treatment plan that was customised to the patient's particular needs by integrating the knowledge of surgeons, radiologists, and traditional medicine practitioners. A thorough diagnostic evaluation, the selection of the best therapy, and the provision of high-quality postprocedure care were all made possible by this integrated approach.

Lessons Learned and Recommendations for Clinical Practice

1. Several important lessons for clinical practise can be learned from this case:
2. A complete diagnostic evaluation employing cutting-edge imaging methods, including an MRI fistulogram, is essential for an accurate diagnosis and effective treatment planning in cases of complex or recurrent fistulas.
3. For persistent transsphincteric fistulas, Kshara Sutra therapy may be an option or a supplement to current therapies, particularly when those treatments have proven ineffective.
4. By utilising the distinctive abilities and experience of each team member, a multidisciplinary approach and teamwork among healthcare professionals can help secure the best possible patient results.
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Future Research Directions
1. This instance emphasises the necessity for additional study to clarify the function of Kshara Sutra therapy in treating complex and persistent fistulas. Future research should concentrate on:
2. bigger, controlled trials to determine the Kshara Sutra therapy's safety and efficacy profile.
3. contrasting Kshara Sutra therapy's long-term effects and recurrence rates with those of other types of medical care.
4. to improve patient outcomes, it may be beneficial to combine Kshara Sutra therapy with other forms of treatment, like surgery or pharmacology.

CONCLUSION
This example illustrates the Kshara Sutra therapy's potential effectiveness in treating persistent transsphincteric fistulas, especially when other treatments have failed. The successful symptom relief and lack of significant side effects imply that Kshara Sutra therapy may be a suitable alternative for or addition to conventional therapies. The example emphasises the importance of a thorough diagnostic evaluation, a multidisciplinary approach, and taking alternative medicines into account while managing difficult situations. In order to validate these results and investigate the potential advantages and disadvantages of Kshara Sutra therapy in the broader context of fistula management, more study is required.

Patient Perspective
The patient experienced a significant improvement in his quality of life after receiving Kshara Sutra therapy. He was glad to find a treatment that worked after three unsuccessful procedures, and he was especially happy with the absence of significant issues. The patient was appreciative with the comprehensive care he received, which included rigorous post-procedure care and follow-up as well as a careful diagnostic assessment.

Informed Consent
The patient provided written consent to publish this case report and any associated images. A copy of the written consent is on file with the editor of this publication and is available for review.

Competing Interests
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Authors' Contributions
Author A performed the diagnostic assessment, directed the Kshara Sutra therapy, and produced the manuscript. With his surgical expertise, Author B helped to the treatment planning and follow-up. Author C took part in the Kshara Sutra therapy as well as the collection and analysis of data. All authors have read and approved the final draft.

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