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Case Report

Low recto-vaginal fistula cured by Kshar Sutra (a medicated seton) treatment: a case report

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ABSTRACT

Rectovaginal fistulas (RVFs) are challenging to treat, primarily due to their high recurrence rate and the risk of faecal incontinence following surgical intervention. A 30-year-old woman was suffering from low RVF. An herbal medicated seton, known as 'Kshar Sutra,' was used to treat the patient. The local anaesthesia was used in and around the fistula track. Weekly thread changes were done on an outpatient basis for four weeks. There were no complications such as severe bleeding, secondary infection, severe pain, and incontinence. The patient has been fistula-free for the last 5 years. Low RVF can be treated safely by an herbal Kshar Sutra seton without any complications.

Keywords: Ayurvedic treatment, Kshar Sutra, Recto-vaginal fistula, Seton

INTRODUCTION

Rectovaginal fistula (RVF) may result from obstetric trauma, surgical procedures leading to unrecognized injury to the rectum or vagina, diverticular disease, Crohn's disease, malignancies, or radiation exposure.¹⁻⁴ Rectovaginal fistulas are classified into two types based on their anatomical location. Low RVFs are situated in the distal third of the rectum and the lower portion of the vaginal canal. Being closest to the anal verge, they are typically managed using a perineal surgical approach. High RVFs are positioned between the mid-rectum and the posterior vaginal fornix and usually require a transabdominal approach for surgical correction.⁵ Management of RVF includes addressing the underlying condition, repairing the fistulous tract, and managing associated complications.^{6,7} We present a rare case of the low RVF cured by Kshar Sutra (a medicated seton).

CASE REPORT

A 30-year-old woman was suffering from recurrent Bartholin gland abscesses for 6 months. She had a history of incision and drainage for the Bartholin abscess. The

infection continued to form a fistula connecting with the anus. A physical examination was conducted in January 2020 in our clinic. On examination, the external opening was observed just inside the vaginal opening at the base of the labia minora. Anal opening was at 12 O' clock position 1 cm from the anal verge (Figure 1). The magnetic resonance imaging-fistulogram confirmed a recto-vaginal fistulous track of length 1.7 to 1.8 cm with a diameter of 4.5 to 4.6 mm (Figure 2). The patient had no obstetrical history or any other disease such as diabetes mellitus, Crohn's, tuberculosis, or sexually transmitted diseases. An herbal medicated seton called "Kshar Sutra" was used for treating low RVF.

Procedure

Local anesthesia was used to numb the fistula track. The fistula was traced with a flexible probe. Kshar Sutra seton was inserted through the vaginal opening and taken out from the anal opening to the anus. Both ends of the thread were tied to secure the position (Figure 3). The procedure took approximately 20 minutes. The patient was discharged after 1 hour. The non-steroidal anti-inflammatory drug was recommended as a painkiller

whenever required. Pre- or postoperative antibiotics were not used.



Figure 1: Rectovaginal fistula.

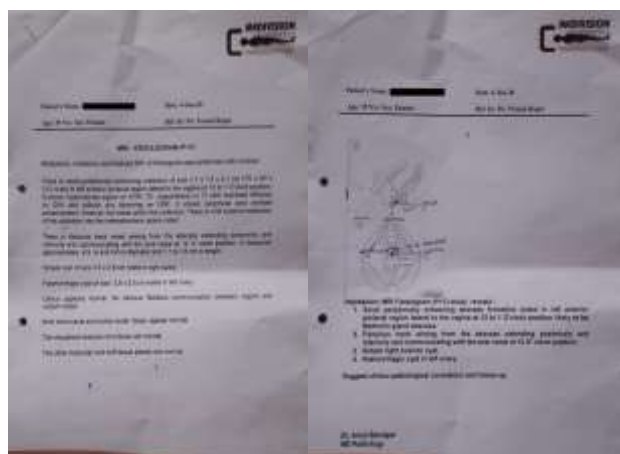


Figure 2: The magnetic resonance imaging-fistulogram.

Follow-up

Weekly thread changes were done on an outpatient basis. The local anesthesia was used in and around the fistula track. The old thread was replaced with a new one. Both ends of the threads were tied to fix the position. The patient had a weekly follow-up. Weekly follow-up was conducted, and after four weeks of Kshar Sutra application, a clean, open wound was observed (Figure 4). Supplementary medicines were not administered, as the herbal combination itself possesses antibacterial and antifungal properties.

There were no complications such as severe bleeding, secondary infection, severe pain, and incontinence. Daily dressing was done with 10% povidone-iodine liquid. In 4 weeks, the wound was completely healed. The patient has been fistula-free for the last 5 years (Figure 5). A signed consent has been obtained from the patient.



Figure 3: Both ends of Kshar Sutra tied.



Figure 4: Follow-up after four weeks of Kshar Sutra application.



Figure 5: Follow-up on 31st May 2025.

DISCUSSION

Medical management involves controlling infection and related symptoms, optimizing treatment of the underlying

condition—such as Crohn’s disease or diverticulitis—and providing supportive care to improve the patient’s overall health. Additional conservative approaches include non-surgical methods aimed at fistula closure, such as fibrin glue application or other sealing techniques. However, the success rates of these interventions remain relatively low.⁵ Various surgical techniques are employed to manage RVF, based on factors such as the fistula’s complexity, recurrence, and the underlying medical condition.⁸⁻¹¹ Basic interventions, such as the use of a draining seton in cases of recurrence or active infection, can help control infection and improve local tissue health.

The close anatomical proximity of the rectal and vaginal walls, separated by only a thin layer of tissue, makes RVF repair technically challenging. Effective repair is guided by key surgical principles: complete excision of the diseased fistulous tract, interposition of well-vascularized, healthy tissue to promote healing, and the creation of a durable barrier between the rectum and vagina. While these principles may not always be achievable, adherence to them significantly improves the likelihood of successful fistula closure. Debridement of the fistula and the use of tissue flaps are standard surgical techniques. Common flap procedures include local endorectal advancement flaps for simple RVFs and regional gracilis myocutaneous flaps for more complex cases.^{9,12} RVF is a difficult complication to manage, often associated with low treatment success and considerable impact on patients’ quality of life.¹³

Hippocrates had mentioned the use of horse hair setons.¹⁴ A medicinal herbal thread named “Kshar Sutra” was elucidated for fistula-in-ano by Sushrut, an ancient Indian surgeon, in 500 BC.¹⁵ The preparation of Kshara Sutra is a lengthy and intricate process. The standard traditional Ayurvedic method was employed to prepare the Kshara Sutra thread. Barbour’s cotton thread no. 20 was coated with the latex of the snuhi plant (*Euphorbia neriifolia* Linn), a water-soluble extract of apamarga (*Achyranthes aspera* Linn), and turmeric powder. A total of 21 layers of this herbal combination were applied in a sterile environment. Once the coatings had dried, the threads were cut into different lengths as required. Since the medicinal coating reacts with the infected tissue and dissolves within seven days, the thread must be replaced with a new one. The Kshar Sutra is a combination of herbal medications and a cutting seton. The Kshar Sutra releases the drug slowly, and it has a cutting and healing action. The gradual cutting and healing action prevents the incontinence and other adverse effects. Kshar Sutra technique is an ancient Indian para-surgical treatment. This is a middle way between existing aggressive and conservative treatments. Also, there is no need for any post-operative medication for healing, and keeping the wound clean is enough.

CONCLUSION

Low RVF can be treated safely by an herbal Kshar Sutra seton without any complications.

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