



Post-operative Care in Ksharasutra Therapy – An Ayurvedic Approach

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ABSTRACT:

A fistula is a condition where two epithelial surfaces are abnormally connected. When there is a connection between the anal canal and the perineal area, it is referred to as a fistula-in-ano. The tunnel is usually lined with unsightly granulation tissue. The main cause of this condition is a poorly treated cryptoglandular infection. Over time, Ksharasutra has remained the preferred treatment option for fistula-in-ano due to its lower rates of complications, such as recurrence and incontinence. Despite its benefits, there are notable drawbacks, including discomfort, prolonged anxiety, more frequent hospital visits, a longer treatment period, and significant scarring after surgery, among others. IFTAK (Interception of Fistulous Tract with Application of Ksharasutra) is an innovative technique that enhances Ksharasutra, making it more patient-friendly while addressing the disadvantages of the traditional method. In this instance, IFTAK is performed under local anesthesia.

KEY WORDS: Ksharasutra, cryptoglandular, fistula-in-ano, perineal area etc.

INTRODUCTION:

A fistula-in-ano is an abnormal channel that connects the anal canal or rectum to the skin around the anus. It typically results from a previous anorectal abscess that did not heal fully. Symptoms can include persistent or recurring pus or blood-stained discharge near the anus, pain and swelling in the perianal area (especially during bowel movements), itching, irritation, or discomfort around the anus, the formation of a small opening near the anus, and recurrent abscesses. Surgical intervention is the primary treatment approach, as fistulas rarely heal spontaneously. Common surgical methods include: Fistulotomy – where the fistulous tract is opened up to heal from the bottom;

Fistulectomy – which involves complete surgical removal of the fistulous tract Set on Placement where a thread is inserted into the tract to facilitate gradual cutting and healing, particularly useful for complex or high fistulas; LIFT Procedure (Ligation of Intersphincteric Fistula Tract) – a surgery aimed at preserving the sphincter; Ksharasutra Therapy (an Ayurvedic method) – where a medicated thread is applied for cutting, cleaning, and healing the tract while minimizing the chances of recurrence.

In Ayurveda, it is noted that certain health conditions may require surgical treatment for effective resolution. Though the Charaka Samhita mainly focuses on Kayachikitsa, it also acknowledges that ailments such as Gulma, Arsha, Bhagandara, and Ashmari may need surgical attention. Acharya Sushruta, recognized as the pioneer of surgery, has described various surgical procedures known as Shastra Karma, along with Anu-Shastra Karma, which includes Agnikarma, Jalaukavacharana, and Kshara Karma. Among these, Kshara Karma is regarded as one of the most significant para-surgical methods due to its ability to excise, incise, and cauterize. The use of Kshara Sutra in treating anorectal conditions has become popular because of

its straightforwardness, effectiveness, and low rate of recurrence. Ksharasutra functions through both mechanical and chemical mechanisms, allowing it to cut, clean, and heal the fistulous tract simultaneously. Ksharasutra therapy is a unique Ayurvedic parasurgical procedure widely used for the management of Bhagandara (Fistula-in-Ano), Arsha (Piles), Shalyaj vyadhis (certain sinus tracts) and other conditions where tract formation occurs. Ksharasutra combines surgical precision with medicinal chemistry. Unlike conventional surgical excision, Ksharasutra promotes gradual excision of the pathological tract through chemical cauterization and simultaneous healing, minimizing recurrence and preserving sphincter function.

However, the cornerstone of successful outcomes in Ksharasutra therapy lies not only in the operative phase but in the post-operative care — a well-defined, evidence-informed Ayurvedic regimen described in classical texts such as *Sushruta Samhita*, *Sharngadhara Samhita*, contemporary research, and clinical practice.

This article elaborates on post-operative care principles, management protocol, wound care, diet and lifestyle modifications, complications, rehabilitation, and outcome optimization in Ksharasutra therapy.

Understanding Ksharasutra and Post-operative Objectives

Ksharasutra is a medicated thread prepared by repeated coating of herbal alkaline drugs (Kshara), latex of medicinal plants, and other herbal decoctions on a surgical linen thread. The process imparts chemical cauterizing, proteolytic, antimicrobial, and healing properties to the thread.

- Gradual cutting of tract tissues, Chemical debridement, Antimicrobial action
- Promotion of healthy granulation and healing

Post-operative Care – Core Objectives

Post-operative care is not an afterthought; it is interwoven into the therapeutic mechanism itself. The primary aims after Ksharasutra placement are:

- Effective pain management, Infection prevention, Promotion of tract healing
- Facilitating sloughing and cutting action of the Ksharasutra
- Maintaining hygiene and local care, Optimizing bowel habits
- Nutrition support to bolster immunity and repair, Patient education and compliance

Classical Ayurvedic Principles Underlying Post-operative Care

Post-operative care in Ayurveda focuses on:

- Samsodhana (Purification), Shamana (Pacification), Ropana (Healing), Balancing Doshas, Enhancing Agni (digestive/metabolic fire), Maintaining equilibrium of Dhatus (tissues)

The principles are integrated into modern post-Ksharasutra protocols.

❖ Observation and Initial Management

After placement of Ksharasutra:

- Vital monitoring: Pulse, temperature, blood pressure
- Observe for bleeding or hematoma
- Pain assessment: Mild analgesics when required

❖ Sitz Bath (Parisheka / Upanaha)

Sitz bath with lukewarm water is recommended twice a day to:

- Maintain local hygiene, Reduce local inflammation
- Improve microcirculation, Relieve spasm of sphincter muscles

Classical texts also recommend herbal decoctions (e.g., Triphala kwatha) for sitz baths due to mild astringent and antimicrobial properties.

❖ Local Cleansing

Local wound cleansing should be done gently:

- Use sterile normal saline, Remove discharge or crusts carefully, Avoid strong antiseptics unless indicated

❖ Pain and Spasm Management

Spasm of anal sphincter can be a source of discomfort. Ayurvedic measures include:

- Sitz bath with warm water, Vata pacifying herbs like Bala, Jatamansi in decoction
- Pain relief with mild analgesics – preferably through Ayurvedic formulations containing herbs like Shunthi (Ginger), Pippali when appropriate

Local Wound Care and Dressing Protocol

❖ Dressing Change Timing

The first dressing change is typically done 24 hours post procedure, followed by regular dressing as per discharge amount and local condition.

❖ Cleaning and Dressing Technique

- Hand hygiene and gloves, Clean area with sterile saline, Remove exudate, dried blood, crusts
- Apply medicated ghee or proper wound dressing material, Cover with sterile dressing

❖ Medicated Auxiliary Measures :-

In traditional practice, the use of:

- Triphala guggulu paste or
- Yastimadhu (Liquorice) apply on dressing is often indicated for mild antimicrobial and anti-inflammatory effect.

Managing the Ksharasutra Thread

❖ Traction and Knots

- Free from excessive tension, Knots secured, Checked for migration or loosening.

❖ Weekly Thread Change

Classically, the Ksharasutra is changed once a week. Purpose:

- Remove necrosed tissue, Re-apply fresh medicated thread, Promote controlled cutting and healing

At each change:

- Assess tract length, Document discharge, signs of infection, Clean and re-dress appropriately.

Pain, Infection, and Complication Management

❖ Pain Control

Pain is expected initially but should be mild to moderate. Management includes:

- Warm sitz bath, Herbal analgesics, Avoid straining during defecation.

❖ Infection Control

Signs of infection:

- Increased pain, Pus discharge, Fever, Erythema

Management includes:

- Local antiseptic cleaning, Herbal antimicrobial sitz baths (Triphala)
- Systemic antibiotics only if indicated

❖ Bleeding

Minor oozing is common early on. Persistent bleeding requires:

- Pressure dressing, Evaluate for clotting disorders, Consult surgical backup.

❖ Allergic Reactions and Sensitivity

Some patients may react to thread coatings. In such cases:

- Convert to alternate medicated thread
- Modify herbal composition, Close monitoring.

Diet and Digestion: Ayurvedic View

❖ Significance of Diet

In Ayurveda, diet directly influences:

- Agni (digestive fire), Ojas (immunity), Dhatu formation (tissue repair), Dosha equilibrium.

Post-operative diet is essential for:

- Reducing Vata aggravation, Preventing constipation, Minimizing toxin formation.

❖ Recommended Dietary Principles

➤ Soft, Warm, Easily Digestible Diet

- Rice gruel, moong dal khichdi, Warm soups, Steamed vegetables

Avoid:

- Heavy, oily, spicy, and fermented foods

➤ Fiber and Bowel Regulation

Constipation increases local strain. Recommendations:

- Isabgol (psyllium husk) with warm water, Triphala churna 3–6 g at bedtime
- Adequate water intake

➤ Herbal Support for Digestion

- Cumin, coriander, fennel seeds infused water, Hingvastak churna for digestion

➤ Hydration and Immunonutrition

Hydration supports wound healing. Include:

- Coconut water, Herbal teas (Tulsi, ginger), Fresh fruit juices without sugar

Herbs like Guduchi and Ashwagandha may support immunity when appropriate.

❖ Lifestyle and Activity Modification

➤ Rest and Gradual Mobilization

- Absolute rest for first 24–48 hrs
- Gradual mobilization afterwards
- Avoid lifting weights and straining

❖ Sleep and Routine

- Ensure adequate sleep
- Follow daily routine (*Dinacharya*) for metabolic stability

❖ Psychosocial Aspects

Anxiety and stress can affect healing. Encourage:

- Counseling, Supportive environment, Gentle relaxation practices (breathing, meditation)
- ❖ Ayurvedic Adjunct Therapies
- External Applications (Abhyanga / Lepas)

Careful external application of:

- Bala taila, Godanti bhasma paste, Yastimadhu paste

Where indicated, to reduce inflammation and support healing.

❖ Herbal Decoction Therapies

Local sitz baths using:

- Triphala kwatha, Neem decoction

Support cleansing and antimicrobial environment.

❖ Oils and Ghee

Application of medicated ghee may provide:

- Vata pacification, Tissue nourishment, Moist environment for healing

Follow-up Protocol and Healing Assessment

❖ Clinical Indicators of Healing

- Reduced pain, Decreasing discharge, Tissue granulation, Gradual shortening of tract length

❖ Weekly Assessment

At weekly visits for thread change:

- Evaluate tract dimensions, Note discharge, bleeding, Check general health

Complications and Management

❖ Delayed Healing Causes:

- Poor nutrition, Poor hygiene, Infection, Systemic disease (diabetes)

Management:

- Nutritional optimization, Local care, Investigate systemic cause.

Patient Education and Compliance

❖ Importance of Education

Patient understanding directly influences compliance. Teach:

- Wound care, Sitz bath technique, Diet and bowel habits, Recognizing warning signs

❖ Written Instructions and Follow-up

- Written advice, Emergency contact, Schedule reminders

CONCLUSION:

Post-operative care in Ksharasutra therapy is an intricate blend of Ayurvedic wisdom, clinical discipline, nutrition science, and patient engagement. It is not merely supportive — it is therapeutic.

A structured approach encompassing:

- Hygienic wound care, Dietary modulation, Lifestyle realignment
- Regular monitoring, Complication vigilance

ensures optimal healing, minimal recurrence, enhanced quality of life, and reaffirmation of Ayurveda's holistic vision.

In the era of integrative medicine, standardizing post-Ksharasutra care using both classical guidelines and modern evidence promotes safe, effective, and patient-centered outcomes.

If you'd like, I can also provide tables, patient handouts, clinical protocols, or references for publication or academic use.

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