

A REVIEW ON FISSURE IN ANO MODERN AND AYURVEDIC ASPECT

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ABSTRACT

Anal fissure is a common anorectal condition characterized by a tear in the anal mucosa, often leading to pain, bleeding, and discomfort. This article provides a comprehensive review of anal fissure from both modern medical and Ayurvedic perspectives. The modern review covers epidemiology, etiology, clinical presentation, diagnosis, and treatment options, including conservative management, pharmacological interventions, and surgical procedures. The Ayurvedic review explores the condition through the lens of traditional Indian medicine, discussing its conceptualization as "Parikartika" or "Gudabhramsa," along with herbal remedies, dietary recommendations, and holistic approaches. A comparative analysis highlights the integration of both systems for optimal patient care. The article concludes with insights into future research directions. This review is based on a synthesis of peer-reviewed literature and classical Ayurvedic texts, emphasizing evidence-based practices.

KEYWORDS: Fissure in Ano, Parikartika, Anorectal Disease.

INTRODUCTION

Anal fissure, a linear tear in the distal anal canal, is one of the most prevalent benign anorectal disorders, affecting individuals across all age groups but predominantly young adults and the elderly. It is estimated that anal fissures account for approximately 10-15% of

all colorectal consultations in primary care settings, with an annual incidence of about 1 in 350 people in the general population.^[1] The condition is more common in women than men, particularly during the postpartum period, and is often associated with constipation, straining during defecation, and low-fiber diets.^[2] From a pathophysiological standpoint, anal fissures result from trauma to the anoderm, exacerbated by high anal sphincter pressures and poor blood supply to the posterior midline, where most fissures occur.^[3] Chronic fissures may lead to fibrosis, sentinel piles, and persistent symptoms, distinguishing them from acute ones that heal spontaneously within weeks. Modern medicine classifies anal fissures into acute and chronic types, with management ranging from lifestyle modifications to surgical interventions. In contrast, Ayurveda, the ancient Indian system of medicine, views anal fissures through the prism of dosha imbalances, particularly Vata aggravation, and employs natural remedies to restore harmony. This article aims to bridge these paradigms by reviewing anal fissure from modern and Ayurvedic viewpoints. It explores diagnostic approaches, treatment modalities, and potential synergies, drawing on scientific evidence and traditional wisdom. By doing so, it seeks to inform healthcare practitioners and patients about integrative options for managing this debilitating condition.

Modern Review of Anal Fissure Epidemiology and Risk Factors

Anal fissure is a global health concern, with prevalence rates varying by region. In Western countries, it affects 1-2% of the population, while in developing nations, higher rates are reported due to dietary habits and hygiene practices.^[4] Risk factors include chronic constipation, diarrhea, inflammatory bowel disease (IBD), and anal intercourse. Occupational factors, such as prolonged sitting or heavy lifting, may also contribute. Genetic predispositions, like connective tissue disorders, increase susceptibility.^[5]

Pathophysiology

The anal canal's anatomy plays a crucial role. The internal anal sphincter (IAS) maintains continence, but hypertonicity can impede blood flow, leading to ischemia and fissure formation.^[6] Acute fissures heal within 4-6 weeks, but chronic ones persist due to fibrosis and exposure to fecal matter. The posterior midline is most affected due to the absence of supportive tissue.^[7]

Clinical Presentation and Diagnosis

Patients typically present with severe anal pain during and after defecation, often described as "knife-like." Associated symptoms include bleeding, itching, and constipation. Physical

examination reveals a visible tear, and digital rectal examination may elicit pain. Chronic fissures show additional signs like a sentinel skin tag or hypertrophied papilla.^[8] Diagnosis is primarily clinical, supported by anoscopy or proctoscopy to rule out underlying conditions like Crohn's disease or malignancy. Imaging, such as endoanal ultrasound, is reserved for complex cases.^[9] Treatment Options.

Conservative Management

First-line treatment involves dietary modifications, such as increasing fiber intake (25-30 g/day) and fluid consumption to soften stools. Topical agents like nitroglycerin ointment (0.2-0.4%) reduce IAS pressure, promoting healing in 60-80% of cases.^[10] Calcium channel blockers (e.g., diltiazem 2%) are alternatives for those intolerant to nitrates.^[11]

Pharmacological Interventions

Botulinum toxin injections into the IAS provide temporary relaxation, effective in 70-90% of patients.^[12] Oral medications, including stool softeners and laxatives, alleviate constipation. For refractory cases, biofeedback therapy trains patients to relax the sphincter.^[13]

Surgical Management

Surgical options are considered when conservative treatments fail. Lateral internal sphincterotomy (LIS) is the gold standard, involving partial division of the IAS to reduce pressure, with success rates exceeding 90%.^[14] However, complications like incontinence (1-5%) necessitate careful patient selection. Alternatives include fissurectomy with or without advancement flaps, particularly for chronic fissures.^[15] Emerging therapies, such as platelet-rich plasma injections and laser treatments, show promise in preliminary studies.^[16]

Ayurvedic Review of Anal Fissure

Conceptualization in Ayurveda In Ayurveda, anal fissure is primarily understood as "Parikartika" (fissure) or "Gudabhramsa" (prolapse-like condition), attributed to imbalances in the Vata dosha, which governs movement and dryness.^[17] Vata aggravation leads to "Ruksha" (dryness) and "Khara" (roughness) in the anal region, exacerbated by poor diet, stress, and irregular habits. Other doshas, like Pitta (heat) and Kapha (mucus), may contribute to inflammation or discharge.^[18]

Classical texts, such as the Charaka Samhita and Sushruta Samhita, describe Parikartika as a condition of the "Guda" (anus), caused by "Vataja" disorders. Symptoms align with modern

descriptions: pain, bleeding, and difficulty in defecation.^[19]

Etiology and Pathophysiology

Ayurvedic etiology emphasizes lifestyle factors: excessive consumption of dry, spicy, or fermented foods; suppression of natural urges; and sedentary lifestyles. These disrupt "Agni" (digestive fire), leading to "Ama" (toxins) accumulation, which manifests as fissures.^[20] Chronic cases involve "Dhatu Kshaya" (tissue depletion), particularly in "Mamsa" (muscle) and "Rakta" (blood).

Diagnosis and Assessment

Diagnosis involves "Trividha Pariksha" (threefold examination): Darshana (inspection), Sparshana (palpation), and Prashna (questioning). Pulse diagnosis ("Nadi Pariksha") assesses dosha imbalances. Modern tools like anoscopy can complement Ayurvedic assessments.^[21]

Treatment Modalities

Ayurvedic treatment focuses on "Shodhana" (purification), "Shamana" (palliation), and "Rasayana" (rejuvenation) therapies.

Dietary and Lifestyle Recommendations

Patients are advised to follow a "Vata-pacifying" diet: warm, moist foods like ghee, rice, and cooked vegetables. Avoid dry, cold, or spicy items. Adequate hydration and regular bowel habits are emphasized. Yoga asanas like "Pavanamuktasana" and "Malasana" promote pelvic floor relaxation.^[22]

Herbal Remedies Key herbs include

Triphala: A combination of Amalaki, Bibhitaki, and Haritaki, used for its laxative and detoxifying properties.^[23]

Guggulu: Commiphora mukul resin reduces inflammation and heals tissues.^[24] Pippali (Piper longum): Enhances digestion and alleviates Vata. Shatavari (Asparagus racemosus): Nourishes tissues and reduces dryness. Topical applications include oils like sesame or castor oil mixed with herbs for external relief.^[25]

Panchakarma Therapies

Procedures like "Basti" (medicated enema) with oils such as "Eranda" (castor) or "Dashamula" decoctions cleanse the colon and balance Vata.^[26] "Abhyanga" (oil massage) on

the abdomen improves circulation.

Internal Medications

Formulations like "Chitrakadi Vati" or "Agastya Haritaki" are prescribed for constipation and fissure healing.^[27]

Integrative Approaches

Ayurveda encourages combining therapies with modern medicine, such as using herbal ointments alongside nitroglycerin for enhanced efficacy.^[28]

Comparative Analysis and Integration

Modern medicine excels in acute interventions and diagnostics, while Ayurveda offers holistic, preventive strategies. For instance, surgical sphincterotomy addresses mechanical issues, whereas Ayurvedic Basti promotes long-term dosha balance. Studies show that integrating both can reduce recurrence rates; a randomized trial found that patients receiving Ayurvedic herbs post-surgery healed faster.^[29]

Challenges include standardization of Ayurvedic practices and evidence gaps. However, growing research validates herbs like Triphala for their antioxidant effects.^[30]

DISCUSSION AND CONCLUSION

Anal fissure, though common, significantly impacts quality of life. Modern treatments provide rapid relief through pharmacological and surgical means, but Ayurveda complements with sustainable, natural approaches. Integrating both systems—leveraging modern diagnostics with Ayurvedic therapies—offers a promising path for comprehensive care. Future research should focus on clinical trials comparing modalities and exploring herbal mechanisms. Ultimately, patient-centered care, respecting individual preferences, will optimize outcomes in managing this condition.

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