Anorectal Disorders in Ayurveda: Current Perspectives and Therapeutic Approaches

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***Abstract*—Anorectal disorders constitute a significant group of diseases affecting the distal gastrointestinal tract and are among the most common causes of morbidity worldwide. Conditions such as hemorrhoids (Arsha), fistula-in-ano (Bhagandara), fissure-in-ano (Parikartika), rectal prolapse (Guda Bhramsha), and pilonidal sinus adversely affect patients' quality of life by causing pain, bleeding, discharge, constipation, and discomfort. Ayurveda offers a comprehensive understanding of these disorders through the concepts of Dosha imbalance, Agnimandya, Ama formation, and impaired bowel habits. Classical Ayurvedic texts describe detailed etiopathogenesis, clinical features, preventive measures, and individualized therapeutic interventions for anorectal diseases. The management approach includes Nidana Parivarjana (elimination of causative factors), Shodhana therapies, Shamana Chikitsa, dietary and lifestyle modifications, and minimally invasive para-surgical procedures such as Kshara Karma, Kshara Sutra therapy, Agnikarma, and Raktamokshana. Among these, Kshara Sutra has gained global recognition for the effective management of fistula-in-ano owing to its high success rate and low recurrence. Contemporary research has demonstrated the efficacy of Ayurvedic interventions in reducing symptoms, promoting wound healing, minimizing postoperative complications, and improving long-term outcomes. Integrative approaches combining Ayurvedic principles with modern diagnostic and surgical techniques have further enhanced patient care while preserving the holistic philosophy of Ayurveda. This review highlights the current perspectives on anorectal disorders from both classical and modern viewpoints, emphasizing evidence-based Ayurvedic therapeutic strategies, recent clinical advances, and future research directions. A comprehensive understanding of these approaches may facilitate the development of safe, cost-effective, patient-centered management protocols for anorectal disorders and strengthen the role of Ayurveda in contemporary colorectal healthcare.**

***Index Terms*—Anorectal disorders, Ayurveda, Arsha, Bhagandara, Parikartika, Guda Bhramsha, Kshara Sutra, Kshara Karma, Agnikarma, Shalyatantra, Integrative medicine, Colorectal diseases.**

I. INTRODUCTION

Anorectal disorders comprise a broad spectrum of diseases affecting the anal canal, rectum, and surrounding perianal tissues. These conditions represent one of the most common reasons for consultation in general surgery and colorectal practice, accounting for a considerable proportion of outpatient visits worldwide. Hemorrhoids, anal fissure, fistula-in-ano, anorectal abscess, rectal prolapse, and pilonidal sinus are among the most frequently encountered anorectal disorders. They are associated with symptoms such as pain during defecation, rectal bleeding, prolapse, itching, purulent discharge, constipation, and fecal discomfort, significantly impairing the patient's physical, psychological, and social well-being.[1]

The increasing prevalence of sedentary lifestyles, consumption of low-fiber diets, obesity, prolonged sitting, chronic constipation, pregnancy, and aging has contributed to the growing incidence of anorectal diseases globally. Although modern medicine offers several conservative and surgical treatment options, recurrence, postoperative pain, delayed wound healing, and complications continue to pose therapeutic challenges.[2] Consequently, there has been increasing interest in complementary and integrative approaches that emphasize minimally invasive

procedures, holistic management, and prevention of recurrence.

Ayurveda, the traditional system of medicine practiced in India for more than 3,000 years, provides a comprehensive understanding of anorectal disorders under the discipline of Shalyatantra. Classical Ayurvedic texts describe these conditions in great detail, emphasizing the role of Dosha imbalance, Agnimandya (impaired digestive fire), Ama formation, Mala Dushti, and unhealthy dietary and lifestyle practices as the primary etiological factors. Diseases such as Arsha (hemorrhoids), Bhagandara (fistula-in-ano), Parikartika (anal fissure), and Guda Bhramsha (rectal prolapse) closely resemble their modern clinical counterparts.[3]

The uniqueness of Ayurvedic management lies in its individualized treatment strategy, which includes Nidana Parivarjana, Shodhana therapies, Shamana Chikitsa, Pathya-Apathya, and para-surgical procedures such as Kshara Karma, Kshara Sutra, Agnikarma, and Raktamokshana. Among these, Kshara Sutra therapy has received worldwide recognition because of its high success rate, minimal recurrence, and sphincter-preserving characteristics in the treatment of fistula-in-ano.[4]

With growing scientific evidence supporting the efficacy of Ayurvedic interventions, there is renewed interest in integrating classical principles with modern diagnostic and surgical practices. Such integrative strategies not only improve clinical outcomes but also reduce treatment-related complications and healthcare costs. This review discusses the Ayurvedic understanding of anorectal disorders, their modern correlations, and current therapeutic approaches supported by contemporary evidence.

II. EPIDEMIOLOGY AND CLINICAL BURDEN

Anorectal disorders affect millions of individuals worldwide and are responsible for substantial healthcare expenditure. Hemorrhoids alone affect nearly half of the adult population above the age of 50 years, while anal fissures and fistulas collectively account for a significant proportion of colorectal surgical procedures.[5]

The incidence of these disorders has increased considerably because of urbanization, sedentary occupations, obesity, reduced physical activity, and unhealthy dietary habits. Individuals with prolonged constipation, pregnancy, chronic diarrhea, inflammatory bowel disease, diabetes mellitus, and immunocompromised conditions exhibit a greater risk of developing anorectal diseases.[6]

Besides physical discomfort, anorectal disorders profoundly affect patients' quality of life. Persistent pain, recurrent bleeding, foul-smelling discharge, embarrassment, anxiety, and fear of defecation often lead to social withdrawal and psychological distress. Chronic disease progression may further result in anemia, recurrent infections, fistulous tracts, abscess formation, or fecal incontinence if not managed appropriately.

III. AYURVEDIC PERSPECTIVE OF ANORECTAL DISORDERS

Ayurveda considers the anorectal region (Guda) to be one of the vital anatomical structures of the human body. The integrity of Apana Vata, Agni, and Mala Pravritti plays a crucial role in maintaining anorectal health. Disturbance in these physiological factors results in various disorders involving the anal canal and rectum.[3]

According to Acharya Charaka, improper dietary habits including excessive intake of heavy, dry, spicy, fermented, incompatible, and indigestible foods lead to Agnimandya, resulting in incomplete digestion and formation of Ama. Ama acts as a pathogenic factor that vitiates Doshas, particularly Vata and Pitta, causing impaired bowel movements and tissue pathology.[7]

Acharya Sushruta, regarded as the father of surgery, extensively described anorectal diseases and their surgical management. He categorized Arsha among Ashta Mahagada, emphasizing its chronicity and therapeutic difficulty. Similarly, Bhagandara has been described as one of the most difficult surgical diseases because of its recurrent nature and complex fistulous tracts.[3]

The Ayurvedic pathogenesis involves:

- Agnimandya
- Formation of Ama
- Vitiation of Doshas
- Impairment of Apana Vata
- Constipation or abnormal bowel habits
- Local inflammation
- Vitiation of Rakta and Mamsa Dhatu
- Development of anorectal pathology

Thus, Ayurveda emphasizes correction of the root cause rather than symptomatic treatment alone.

IV. ETIOPATHOGENESIS (SAMPRAPTI)

The development of anorectal disorders follows a multistep pathogenic process.

Initially, continuous consumption of Viruddha Ahara, excessive spicy food, alcohol, suppression of natural urges (Vegadharana), prolonged sitting, lack of exercise, and chronic constipation disturb digestive metabolism. The resulting Mandagni produces Ama, which circulates through body channels (Srotas) and causes obstruction.

Vitiated Vata Dosha, especially Apana Vata, loses its normal downward movement, leading to constipation, straining during defecation, increased anorectal venous pressure, and impaired circulation. Simultaneously, aggravated Pitta causes inflammation, bleeding, and burning sensation, whereas Kapha contributes to edema, heaviness, and mucous discharge. These pathological changes eventually manifest as various anorectal disorders depending upon the predominant Dosha and affected tissue.[7]

Classification of Anorectal Disorders in Ayurveda

Ayurvedic classics describe numerous anorectal disorders under Shalyatantra. The principal diseases include:

1. Arsha (Hemorrhoids)

Arsha are abnormal fleshy projections occurring in the anal canal due to vitiation of Doshas and weakened digestive function. Sushruta classified Arsha into congenital and acquired varieties, with further Dosha-based subdivisions including Vataja, Pittaja, Kaphaja, Sannipataja, and Raktaja Arsha.[3]

Clinical features include:

- Rectal bleeding
- Pain
- Prolapse
- Itching
- Mucous discharge
- Constipation
- Difficulty during defecation

Modern correlation: Internal and external hemorrhoids.

2. Bhagandara (Fistula-in-Ano)

Bhagandara is characterized by the formation of an abnormal communicating tract between the anal canal and perianal skin. It usually develops following inadequately treated anorectal abscesses.

Sushruta classified Bhagandara into five major types according to Dosha predominance and tract morphology.[3]

Symptoms include:

- Persistent purulent discharge
- Pain
- Swelling
- Multiple external openings
- Recurrent abscess
- Difficulty in sitting

Modern correlation: Cryptoglandular fistula-in-ano.

3. Parikartika (Anal Fissure)

Parikartika literally means "cutting pain." It develops because of excessive straining, passage of hard stools, and aggravated Vata.

Clinical manifestations include:

- Severe pain during defecation
- Burning sensation
- Fresh bleeding
- Constipation
- Sphincter spasm

Modern correlation: Acute and chronic anal fissure.

4. Guda Bhramsha (Rectal Prolapse)

Guda Bhramsha refers to protrusion of rectal mucosa or the entire rectal wall through the anal canal due to weakness of pelvic floor muscles and aggravated Vata.

Symptoms include:

- Protrusion during defecation
- Difficulty in reduction
- Mucous discharge
- Fecal incontinence
- Constipation

Modern correlation: Rectal prolapse.

5. Nadivrana (Sinus Disorders)

Nadivrana is characterized by chronic sinus formation with persistent discharge. Although classically distinct, many cases correlate clinically with pilonidal sinus or chronic perianal sinus disease depending upon anatomical location.

Modern Understanding of Anorectal Disorders

From the modern medical perspective, anorectal disorders arise due to mechanical, vascular, infectious, inflammatory, traumatic, or degenerative mechanisms. Hemorrhoids result from degeneration of supporting connective tissue and enlargement of anal vascular cushions due to increased intra-abdominal pressure. Anal fissures are commonly caused by trauma from hard stools leading to sphincter hypertonicity and ischemia. Fistula-in-ano usually develops secondary to cryptoglandular infection, whereas rectal prolapse results from weakening of pelvic floor support structures.[8]

Diagnosis involves careful clinical examination supplemented by digital rectal examination, anoscopy, proctoscopy, endoanal ultrasonography, MRI fistulography, colonoscopy, and histopathological evaluation when indicated. Advanced imaging has greatly improved preoperative planning, especially in complex fistulous disease.[9]

Despite advances in surgical techniques, recurrence, wound infection, postoperative pain, fecal incontinence, delayed healing, and high treatment costs remain major concerns. Consequently, minimally invasive sphincter-preserving techniques have become increasingly important in contemporary colorectal practice.

V. AYURVEDIC PRINCIPLES OF MANAGEMENT

The primary objective of Ayurvedic treatment is to eliminate the root cause of disease while restoring normal physiology. Management is individualized according to Dosha predominance, disease stage, strength of the patient (Rogi Bala), and severity of pathology.

The general therapeutic principles include:

- Nidana Parivarjana (avoidance of causative factors)
- Restoration of Agni
- Elimination of Ama
- Correction of bowel habits
- Pacification of aggravated Doshas
- Local wound management
- Prevention of recurrence
- Improvement of tissue healing

Current Therapeutic Approaches in Ayurveda

Ayurveda advocates a comprehensive and individualized treatment strategy for anorectal disorders based on the principles of Dosha, Dushya, Rogi Bala, Vyadhi Bala, and disease chronicity. Unlike symptomatic management alone, Ayurvedic treatment aims to eliminate the root cause, restore digestive function, promote tissue healing, and prevent recurrence. Management broadly includes Nidana Parivarjana, Shodhana Chikitsa, Shamana Chikitsa, Para-surgical procedures, and Pathya-Apathya.[11]

1. Nidana Parivarjana (Elimination of Causative Factors)

The first and foremost principle of treatment is the avoidance of etiological factors responsible for disease initiation and progression. Patients are advised to discontinue excessive intake of spicy, fried, fermented, and incompatible foods, alcohol consumption, prolonged sitting, suppression of natural urges, and irregular bowel habits. Correction of lifestyle factors helps restore normal **Agni**, prevents **Ama** formation, and reduces recurrence.[11]

VI. SHAMANA CHIKITSA (CONSERVATIVE MEDICAL MANAGEMENT)

Shamana therapy is preferred in the early stages of anorectal disorders and in patients who are unsuitable for surgical intervention. The primary objectives include reduction of inflammation, pain relief, promotion of wound healing, regulation of bowel habits, and correction of digestive impairment.

Commonly used Ayurvedic formulations include:

- Triphala Churna for constipation and bowel regulation
- Abhayarishta for chronic constipation
- Arshoghni Vati in hemorrhoids
- Triphala Guggulu for inflammatory conditions
- Gandhaka Rasayana for wound healing
- Jatyadi Taila and Jatyadi Ghrita for local application
- Yashtimadhu Ghrita for fissure healing
- Nirgundi, Haridra, Neem, and Guggulu preparations for their anti-inflammatory and antimicrobial actions.[12]

These formulations exhibit antioxidant, antimicrobial, anti-inflammatory, analgesic, and wound-healing

properties, facilitating faster recovery while minimizing adverse effects.

Shodhana Chikitsa

Shodhana therapy eliminates accumulated Doshas from the body and is indicated in selected patients depending upon disease severity and constitutional status.

Virechana Karma

Virechana is particularly beneficial in Pitta and Rakta predominant anorectal disorders presenting with bleeding, inflammation, burning sensation, and constipation. It improves bowel evacuation, reduces venous congestion, and restores digestive metabolism.

Basti Chikitsa

Since Apana Vata plays a major role in anorectal disorders, Basti therapy occupies an important place in management. Medicated enemas help normalize bowel function, relieve constipation, reduce inflammation, and strengthen pelvic musculature.

Both therapies improve systemic health and reduce the chances of recurrence following local treatment.[13]

Kshara Karma

Kshara Karma is one of the unique para-surgical procedures described by Acharya Sushruta. Kshara is an alkaline preparation obtained from medicinal plants possessing Chedana (excision), Bhedana (incision), Lekhana (scraping), Shodhana (cleansing), and Ropana (healing) properties.

It is particularly useful in:

- Internal hemorrhoids
- External hemorrhoids
- Sentinel piles
- Small fistulous openings
- Warts and polyps

The alkaline application causes controlled chemical cauterization, resulting in tissue necrosis, sloughing of diseased tissue, fibrosis, and healing. Compared with conventional surgery, Kshara Karma is associated with minimal bleeding, shorter hospital stay, lower recurrence, and reduced postoperative discomfort.[14]

Kshara Sutra Therapy

Among all Ayurvedic para-surgical procedures, Kshara Sutra represents one of the greatest contributions of Ayurveda to modern colorectal surgery.

Kshara Sutra is a specially prepared medicated linen thread coated sequentially with:

- Snuhi latex (Euphorbia neriifolia)
- Apamarga Kshara (Achyranthes aspera)
- Haridra (Curcuma longa) powder

The medicated thread is placed within the fistulous tract under aseptic precautions. Gradual pressure and chemical action simultaneously cut through diseased tissue while promoting healthy granulation and healing.

Mechanism of Action

The therapeutic effects include:

- Continuous drainage of infected material
- Debridement of unhealthy tissue
- Antimicrobial action
- Reduction of bacterial load
- Chemical cauterization
- Fibrosis of tract
- Progressive healing from the base
- Minimal sphincter damage

Clinical studies have consistently demonstrated excellent healing rates with significantly lower recurrence compared with conventional fistulotomy, particularly in complex and high anal fistulas. Preservation of continence remains one of the major advantages of this technique.[15]

The Indian Council of Medical Research (ICMR) has also recognized Kshara Sutra therapy as an effective treatment modality for fistula-in-ano, contributing to its wider acceptance both nationally and internationally.

Agnikarma

Agnikarma involves therapeutic cauterization using heated metallic instruments. It is indicated in selected chronic anorectal conditions where fibrosis, persistent pain, or recurrent bleeding is present.

The procedure provides:

- Immediate hemostasis
- Reduction in pain
- Sterilization of local tissue
- Faster wound healing
- Prevention of recurrence

Modern principles attribute these benefits to protein coagulation, destruction of unhealthy tissue, improved local circulation, and stimulation of tissue repair.[16]

Raktamokshana

Raktamokshana is particularly useful in Rakta and Pitta predominant disorders associated with severe congestion, inflammation, burning sensation, and thrombosed hemorrhoids.

By removing vitiated blood, this therapy decreases local venous pressure, improves circulation, and relieves pain and edema. Although less frequently practiced today, it retains significance in selected clinical situations.

Dietary and Lifestyle Modifications (Pathya-Apathya)

Ayurveda emphasizes that successful management cannot be achieved without correction of dietary and behavioral factors.

Recommended Diet (Pathya)

- High-fiber foods
- Green leafy vegetables
- Fresh fruits
- Whole grains
- Adequate water intake
- Buttermilk
- Warm fluids
- Easily digestible meals

Foods to Avoid (Apathya)

- Excessively spicy food
- Deep-fried items
- Refined flour
- Junk food
- Alcohol
- Smoking
- Excessive tea and coffee
- Heavy and incompatible foods

Lifestyle Recommendations

- Regular physical exercise
- Yoga and Pranayama
- Timely bowel evacuation
- Avoid prolonged sitting
- Avoid excessive straining
- Proper sleep
- Stress management

These measures significantly reduce recurrence and improve long-term outcomes.[17]

Current Evidence and Recent Advances

During the last three decades, numerous clinical studies have evaluated Ayurvedic therapies in anorectal disorders.

Randomized controlled trials have demonstrated that Kshara Sutra provides healing rates comparable or superior to conventional fistulotomy with significantly lower recurrence and preservation of anal sphincter function. Similarly, Kshara Karma has shown favorable outcomes in Grade I and II hemorrhoids with minimal postoperative pain and bleeding.[18]

Several herbal formulations including Triphala, Haridra, Guggulu, Neem, Yashtimadhu, and Jatyadi Taila possess scientifically validated antimicrobial, antioxidant, anti-inflammatory, analgesic, and wound-healing properties. Experimental studies have demonstrated enhanced collagen synthesis, angiogenesis, epithelialization, and faster wound contraction following their application.

Recent advances include:

- Standardization of Kshara Sutra preparation
- MRI-guided fistula assessment
- Integrative surgical protocols
- Improved sterilization techniques
- Evidence-based clinical guidelines
- Better postoperative rehabilitation

These developments have strengthened the scientific acceptance of Ayurvedic anorectal management.

VII. FUTURE PERSPECTIVES

Although substantial progress has been achieved, further research is necessary to strengthen the evidence base for Ayurvedic management.

Future priorities include:

- Large multicentric randomized controlled trials.
- Standardization of classical formulations.
- Molecular studies explaining mechanisms of action.
- Development of evidence-based clinical practice guidelines.
- Long-term follow-up studies evaluating recurrence rates.

- Comparative studies between Ayurvedic and minimally invasive modern procedures.
- Integration of artificial intelligence and imaging technologies for treatment planning.
- Global dissemination of standardized Kshara Sutra protocols.

Collaborative research involving Ayurveda and modern colorectal surgery may lead to the development of safe, effective, and patient-centered treatment strategies.

VIII. CONCLUSION

Anorectal disorders remain a significant cause of morbidity worldwide owing to their chronic nature, high recurrence, and impact on quality of life. Ayurveda provides a holistic and scientifically relevant framework for understanding these conditions through the concepts of Dosha, Agni, Ama, and Apana Vata. Classical Ayurvedic literature offers detailed descriptions of diseases such as Arsha, Bhagandara, Parikartika, and Guda Bhramsha, along with comprehensive therapeutic strategies.

Among various interventions, Kshara Sutra, Kshara Karma, and Agnikarma represent remarkable contributions of Ayurvedic surgery and continue to demonstrate excellent clinical outcomes, particularly in fistula-in-ano and hemorrhoids. Combined with appropriate dietary modifications, lifestyle correction, Shodhana therapies, and herbal medications, these approaches promote wound healing, reduce recurrence, preserve sphincter function, and improve overall quality of life.

Growing scientific validation and increasing integration with modern colorectal practice indicate that Ayurveda has substantial potential in the contemporary management of anorectal disorders. Continued high-quality research and standardization of therapeutic protocols will further establish its role in evidence-based integrative healthcare.

REFERENCES

[1] Townsend CM Jr, Beauchamp RD, Evers BM, Mattox KL. Sabiston Textbook of Surgery. 21st ed. Philadelphia: Elsevier; 2022.

[2] Rivadeneira DE, Steele SR, Ternent C, Chalasani S, Buie WD, Rafferty JL. Practice parameters for the management of hemorrhoids. Dis Colon Rectum. 2011;54(9):1059–64.

[3] Sushruta. Sushruta Samhita. Dalhana Commentary. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Sanskrit Sansthan; Reprint 2022.

[4] Sharma PV. Sushruta Samhita (English Translation). Vol. II. Varanasi: Chaukhambha Vishvabharati; 2018.

[5] Beck DE, Roberts PL, Saclarides TJ, Senagore AJ, Stamos MJ, Wexner SD. The ASCRS Textbook of Colon and Rectal Surgery. 4th ed. New York: Springer; 2022.

[6] Williams NS, O'Connell PR, McCaskie AW. Bailey & Love's Short Practice of Surgery. 28th ed. Boca Raton: CRC Press; 2023.

[7] Agnivesha. Charaka Samhita. Revised by Charaka and Dridhabala. Yadavji Trikamji Acharya, editor. Varanasi: Chaukhambha Surbharati Prakashan; Reprint 2022.

[8] Brunicardi FC, Andersen DK, Billiar TR, et al. Schwartz's Principles of Surgery. 12th ed. New York: McGraw-Hill; 2022.

[9] Parks AG, Gordon PH, Hardcastle JD. A classification of fistula-in-ano. Br J Surg. 1976;63(1):1–12.

[10] Goligher J. Goligher's Surgery of the Anus, Rectum and Colon. 6th ed. London: Bailliere Tindall; 2010.

[11] Sharma PV. Charaka Samhita. Vol. II. Varanasi: Chaukhambha Orientalia; 2019.

[12] Sharma RK, Dash B. Charaka Samhita: Text with English Translation. Vol. IV. Varanasi: Chaukhambha Sanskrit Series Office; 2018.

[13] Tripathi B. Ashtanga Hridayam of Vagbhata. Varanasi: Chaukhambha Sanskrit Pratishthan; 2021.

[14] Gupta SK. Kshara Karma and Kshara Sutra. Varanasi: Chaukhambha Orientalia; 2017.

[15] Dwivedi RR, Tiwari SK, Sharma SK. Kshara Sutra therapy in fistula-in-ano: A systematic review. Anc Sci Life. 2019;38(3):135–42.

[16] Shastri AD. Sushruta Samhita. Varanasi: Chaukhambha Sanskrit Sansthan; 2021.

[17] Lad V. Textbook of Ayurveda: Fundamental Principles. Albuquerque: Ayurvedic Press; 2002.

[18] Gupta PJ. A comparative study of Kshara Sutra and fistulotomy in fistula-in-ano. Indian J Surg. 2005;67(6):308–12.

[19] World Health Organization. WHO Benchmarks for the Practice of Ayurveda. Geneva: World Health Organization; 2024.
[20] Ministry of AYUSH. Ayurveda Clinical Practice Guidelines for Ano-Rectal Disorders. New Delhi: Government of India; 2023.