

A Comparative Clinical Study To Evaluate The Efficacy Of Iftak Technique Alone And In Combination With Aragwadhadi Varti In The Management Of Bhagandara (Fistula-In-Ano)

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ABSTRACT

Background:

Bhagandara (fistula-in-ano) continues to pose a therapeutic challenge in day-to-day surgical practice because of delayed healing, recurrence, and concerns regarding sphincter integrity. In routine clinical settings, IFTAK has emerged as a reliable sphincter-preserving modification of Ksharasutra therapy. However, during postoperative follow-up, it becomes evident that surgical correction alone does not always ensure optimal wound healing. Aragwadhadi Varti, a classical Ayurvedic formulation with an acidic pH of 4.62, has traditionally been used to support wound cleansing and repair.

Objective: To assess, in clinical practice, whether the addition of Aragwadhadi Varti improves the outcomes of IFTAK in patients suffering from Bhagandara.

Materials and Methods: We conducted a prospective, randomized clinical study on 30 patients diagnosed with Bhagandara. We treated one group with IFTAK alone, while the second group received IFTAK along with local application of Aragwadhadi Varti. We followed patients regularly and recorded changes in pain, discharge, itching, Unit Cutting Time (UCT), and overall healing of the fistulous tract.

Results: Patients receiving Aragwadhadi Varti along with IFTAK experienced faster and more consistent improvement. Pain relief occurred 42.8% earlier, discharge reduced 16.7% sooner, and itching subsided 25% faster. Objective healing also improved, with UCT reduced by 37.2% and complete tract healing achieved 42.2% earlier. Notably, these benefits were seen even in patients with complex fistulae.

Conclusion: From a clinical perspective, adding Aragwadhadi Varti to IFTAK resulted in quicker symptom control and accelerated healing. This combined approach proved to be safe, effective, and practical for managing Bhagandara.

INTRODUCTION

In clinical practice, Bhagandara is often encountered as a chronic and distressing condition for patients. Classical Ayurvedic texts describe it as one of the Ashta Mahagada, reflecting both its severity and therapeutic difficulty.¹ From a modern standpoint, fistula-in-ano frequently presents with persistent

discharge, pain, itching, and repeated infections, all of which significantly affect quality of life.

Conventional surgical management such as fistulotomy and fistulectomy, although effective, is often associated with prolonged healing time, postoperative pain, recurrence, and risk of anal

sphincter damage.² These limitations necessitate sphincter-preserving and minimally invasive alternatives.

Ksharasutra therapy is a well-established Ayurvedic parasurgical procedure for Bhagandara. Over time, surgeons have increasingly relied on Ksharasutra therapy for its efficacy and sphincter-preserving nature. However, its prolonged treatment duration and frequent thread changes may affect patient compliance. IFTAK was developed as a modification to intercept the fistulous tract at the level of intersphincteric space, thereby reducing tract length and minimizing tissue trauma and healing time while preserving sphincter integrity.³

Despite the effectiveness of IFTAK, postoperative wound care and post operative fibrosis remains crucial for optimal healing and avoidance of recurrence. In our practical experience, while IFTAK addresses the mechanical component of the disease effectively, the local wound environment plays an equally important role in determining the pace of healing. Aragwadhadi Varti has long been used for wound management in Ayurveda. It is described for Vrana Shodhana and Vrana Ropana, possesses properties comparable to chemical debridement, antimicrobial action, and promotion of granulation tissue.⁴ Its acidic pH (4.62) may further contribute to creating an unfavorable environment for pathogenic organisms and enhancing wound healing.⁵ The present study was undertaken considering above factors and we felt it was worthwhile to evaluate its role as an adjunct to IFTAK technique in a structured clinical trial.

MATERIALS AND METHODS:

We carried out this prospective, randomized, open-label study at a tertiary Ayurvedic teaching hospital after obtaining institutional ethical clearance. After explaining the procedure in detail, we enrolled 30 patients who fulfilled the diagnostic criteria for Bhagandara and provided informed consent.

We randomly divided patients into two groups:

Group A: Treated with IFTAK technique alone

Group B: Treated with IFTAK technique along with local application of Aragwadhadi Varti

All patients underwent the IFTAK procedure under appropriate anesthesia. In Group B, Aragwadhadi Varti was applied locally into the residual distal tract on alternate days until healthy wound characteristics were observed. Whereas in Group A, dressing with normal saline was done. During follow-up visits, we carefully examined the wound and documented clinical progress.

ASSESSMENT CRITERIAS:

Subjective: Pain (VAS), discharge, itching

Objective: Unit Cutting Time (days/cm), Healing Index
Statistical analysis was performed using Wilcoxon signed ranks test & Paired t-Test for comparison within the group and Mann-whitney - U test & Independent sample t-Test for comparison between the groups, and $p < 0.05$ was considered statistically significant.

OBSERVATIONS :

In the present study, patients represented a wide spectrum of fistulous complexity. The majority of patients had fistulous tract lengths between 3.6–5 cm (40%), followed by 5.1–7 cm (30%), up to 3.5 cm (23.33%), and more than 7 cm in only 6.67% of cases, indicating inclusion of both simple and complex fistulae. External openings were most commonly located at the 5 o'clock position (23.33%), followed by 11 o'clock (20%) and 1 o'clock (13.3%), with remaining cases distributed across other clock positions, reflecting varied fistula anatomy. A significant proportion of patients (43.3%) had a history of previous anorectal surgery, suggesting altered local anatomy due to fibrosis, scar tissue, or tract distortion, which may complicate management and healing. Additionally, 60% of patients presented with secondary cavities along with the primary fistulous tract, highlighting chronicity and increased disease complexity. Pain was the predominant symptom, present in all patients, while discharge and itching were observed in 93.33% and 70% of patients, respectively. Most patients experienced mild to moderate pain (90%), moderate to severe discharge (73.32%), and mild itching (53.3%), collectively indicating an active yet varied clinical presentation of Bhagandara in the study population.

RESULTS:

The charts attached at the end of this article demonstrate a consistent and earlier reduction in Unit Cutting Time, pain, discharge, and itching in the group treated with IFTAK along with Aragwadhadi Varti compared to IFTAK alone. The lower cumulative values observed in Group B indicate faster cutting of the fistulous tract, earlier symptomatic relief, improved wound cleanliness, and enhanced patient comfort. These findings can be attributed to effective interception and drainage of the fistulous tract achieved by IFTAK, combined with the wound-cleansing, antimicrobial, anti-inflammatory, and tissue-repair promoting actions of Aragwadhadi Varti, which together accelerate healing. Furthermore, the clinical significance of these results is underscored by the complexity of cases included in the study, as 60% of patients presented with fistula having secondary ramifications or cavities. Despite this complexity, the combined approach demonstrated superior

outcomes, highlighting its effectiveness even in advanced and complicated fistula-in-ano cases. P value was less than 0.001 showing highly significance of the study. . No adverse drug reactions, anal incontinence, or recurrence were observed during the follow-up period.

DISCUSSION:

The findings of the present study indicate that Bhagandara predominantly affects young and middle-aged individuals, in whom the disease causes significant morbidity and prolonged functional discomfort. The IFTAK technique demonstrated clear therapeutic benefits by effectively deroofing the fistulous tract, ensuring continuous drainage, reducing treatment duration, minimizing collateral tissue damage, and preserving sphincter function. These factors collectively explain the favorable outcomes observed in both treatment groups.

However, clinical follow-up revealed an important limitation of IFTAK when used alone. While it efficiently addresses the mechanical aspect of fistula management, it does not independently sustain the biochemical and microenvironmental conditions necessary for uninterrupted wound healing. This gap was effectively addressed by the adjunctive use of Aragwadhadi Varti.

Patients treated with IFTAK combined with Aragwadhadi Varti demonstrated consistently superior outcomes compared to those managed with IFTAK alone. In the combined therapy group, pain relief was achieved 42.8% earlier, discharge reduced 16.7% faster, and itching subsided 25% sooner. Objective healing parameters further reinforced these findings, with a 37.2% reduction in Unit Cutting Time and 42.2% faster complete healing of the fistulous tract.

The enhanced outcomes observed in Group B can be attributed to the multifaceted adjuvant action of Aragwadhadi Varti. Its regular application helped maintain a clean and healthy wound (Vrana Shodhana), prevented unhealthy epithelialization within the tract, and supported steady granulation

and epithelialization (Vrana Ropana). The mild scraping (Lekhana) action appeared to limit excessive fibrosis, which is a key factor often associated with delayed healing and recurrence in chronic fistula cases.

Additionally, the acidic pH (4.62) of Aragwadhadi Varti likely played a crucial role in microbial control and in maintaining a favorable biochemical environment within the tract. This acidic environment may also enhance local tissue oxygen release through Bohr's effect, thereby improving cellular metabolism, promoting healthier granulation tissue, and accelerating epithelialization.⁶ Clinically, these effects translated into more robust wound healing and sustained symptom relief, even in complex cases.

Owing to its ease of preparation, cost-effectiveness, and proven efficacy, Aragwadhadi Varti emerges as a practical and valuable adjuvant to IFTAK for durable fistula tract healing.

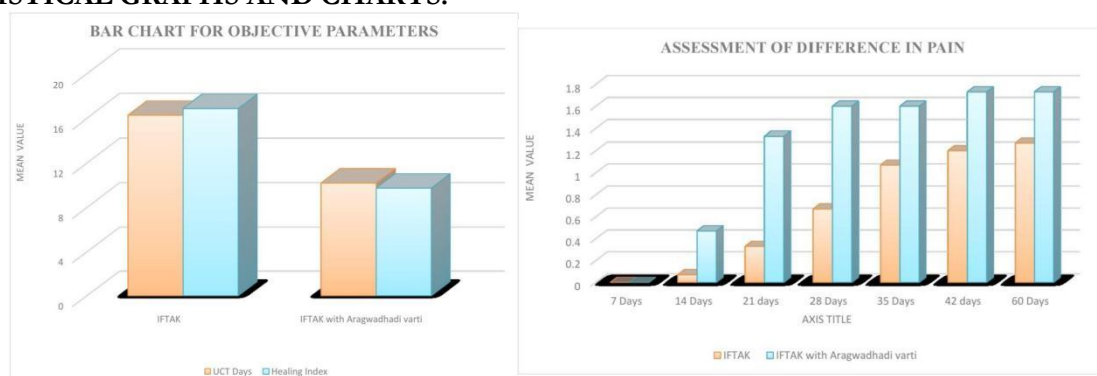
CONCLUSION:

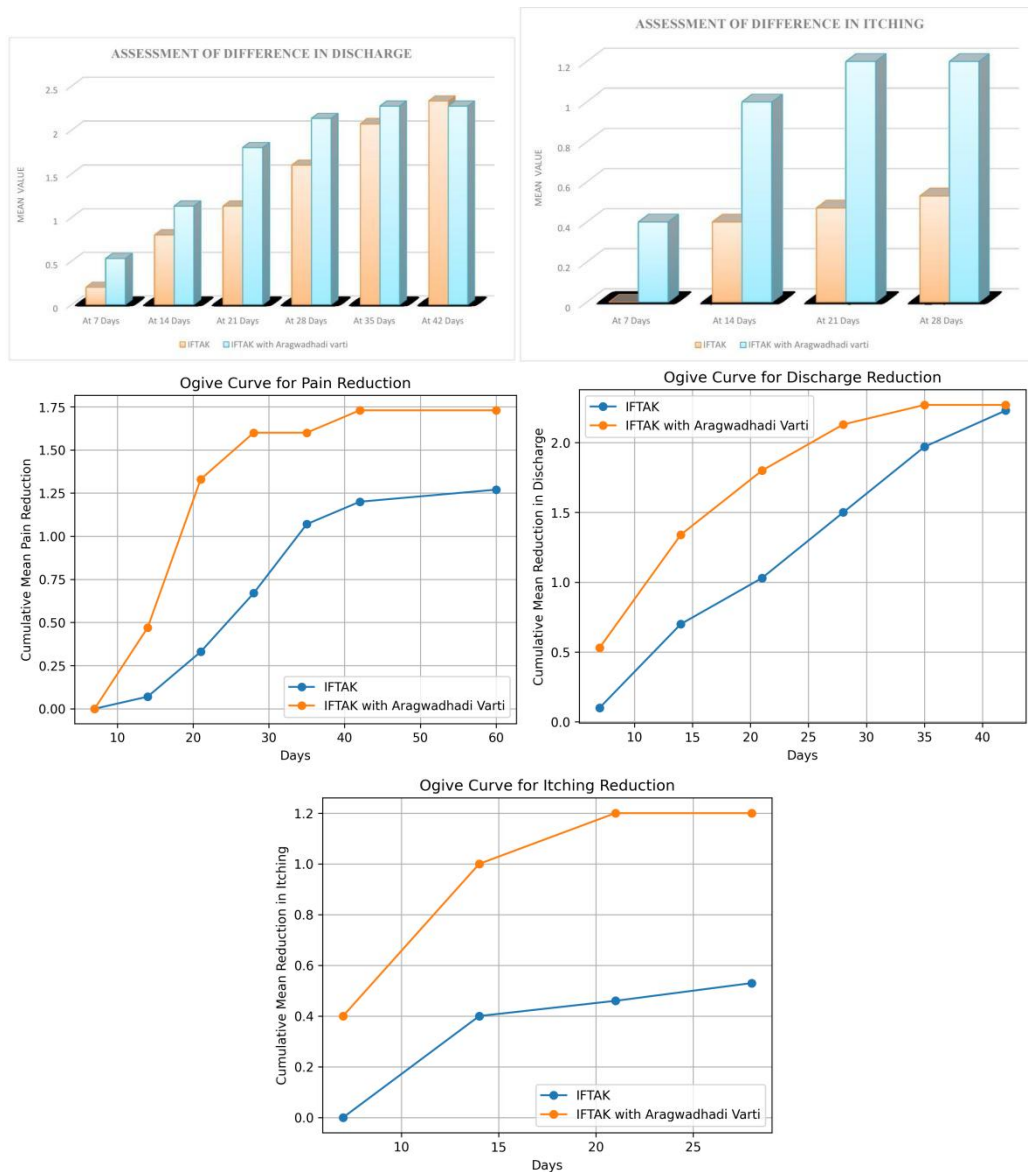
Based on our clinical observations and outcomes, we found that combining Aragwadhadi Varti with IFTAK offers clear advantages over IFTAK alone. The adjunctive therapy accelerated symptom relief, reduced Unit Cutting Time, and promoted earlier and more complete healing of the fistulous tract. Given its ease of preparation, affordability, and effectiveness, Aragwadhadi Varti can be considered a valuable adjunct to the minimal invasive surgical technique IFTAK in the management of Bhagandara.

LIMITATIONS OF THE STUDY:

The main limitation of this study was the small sample size and limited follow-up period. Future studies involving larger populations, longer follow-up, and objective imaging or microbiological assessments would help further validate these findings.

STATISTICAL GRAPHS AND CHARTS:





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