

# Assessment of Therapeutic Efficacy of Guduchi Taila Pichu in Parikartika (Acute Fissure-in-Ano): An RCT

Dr. Kasturi Hiremath<sup>1</sup>, Dr. K M Siddalingamurthy<sup>2</sup>

<sup>1</sup>PG Scholar, Department of Shalya Tantra, S.V.M Ayurvedic Medical College and Research Center, Ilkal, Karnataka, India  
Corresponding Author Email: [kasturih453\[at\]gmail.com](mailto:kasturih453[at]gmail.com)

<sup>2</sup>Professor and HOD, Department of Shalya Tantra, S.V.M Ayurvedic Medical College and Research Center, Ilkal, Karnataka, India  
Email: [siddu1875\[at\]gmail.com](mailto:siddu1875[at]gmail.com)

**Abstract:** **Background:** Parikartika is an anorectal disorder described in Ayurveda, characterized by severe pain, burning sensation, and bleeding during defecation, closely resembling acute fissure-in-ano. It is often recurrent and associated with poor dietary habits, low fiber intake, processed foods, and chronic constipation. Conventional treatments provide temporary relief with uncertain long-term outcomes. Ayurveda recommends various therapies including Deepana, Pachana,, Vatanulomana, and local measures like Pichu Dharana using Snigdha and Sheeta dravyas. **Aim:** To compare the effectiveness of Guduchi Taila Pichu and Yashtimadhu Taila Pichu in the management of Parikartika (acute fissure-in-ano). **Methods:** A randomized controlled trial with pre- and post-test design was conducted. Patients were randomly divided into two groups: Group A received Guduchi Taila Pichu and Group B received Yashtimadhu Taila Pichu. Both groups were given Triphala Churna 3 g twice daily with Sukoshna Jala. Five parameters—pain (Visual Analogue Scale), bleeding, burning, itching, and ulcer size- were assessed on days 1, 15, and 21. Statistical analysis was performed using Wilcoxon signed-rank and Mann-Whitney U tests. **Results:** Both groups showed significant improvement in all parameters. However, Guduchi Taila Pichu demonstrated superior results with statistically significant differences ( $p < 0.05$ ) in pain relief, burning, bleeding, and fissure healing. Improvement was notable from the 15th day onward. **Conclusion:** The mean improvement in Group A (76.24%) was higher than Group B (69.74%). Thus, Guduchi Taila Pichu is more effective than Yashtimadhu Taila Pichu in managing Parikartika

**Keywords:** Parikartika, Acute fissure-in-ano, Guduchi Taila, Yastimadhu taila, Pichu, RCT.

## 1. Introduction

Ano-rectal disorders are progressively increasing in the society. Out of many of the causes, some important are sedentary lifestyle, irregular and inappropriate diet, prolonged sitting or standing and certain psychological disturbances too. Acharya Charaka has explained Parikartika in Niruha basti vyapat and Vamana-virechana vyapat in Siddhithana<sup>1</sup>. He described the condition as a kartanavat and chedanavat shula in Guda along with slimy blood discharge<sup>2</sup>. Acharya Sushruta has explained Parikartika in Netra basti vyapat, Vamana-virechana vyapat and also in poorvarupa of Arsha<sup>3</sup>. He describes the feature as kartanavt peeda in Guda, Bastishiras and Nabhi<sup>4</sup>. Acharya Kashyapa classifies the condition into three types as Vataja, Pittaja and Kaphaja<sup>5</sup>.

Parikartika resembles to Fissure-in-ano according to Modern Surgery. It is described as a longitudinal split in anoderm of the distal anal canal which extends from the anal verge proximally towards but not beyond the dentate line<sup>6</sup>. It is characterized by excruciating pain during and after defecation, bleeding per anum along with spasm of anal sphincter. The cause of Fissure is primarily constipation with passing of hard stool and secondary due to many diseases like chronic amoebic dysentery, diverticulitis, irritable bowel syndrome, ulcerative colitis and even post haemorrhoidectomy or fissulectomy. The common site is 6 o' clock that is midline posterior, lower half of the anal canal which is commonly found in young adults. In males fissures usually occur in the midline posterior [90%], much less commonly anterior [10%]. In females fissures on the midline

posteriorly are slightly commoner than anteriorly [60:40]. The disease can be classified into two namely Acute and Chronic. The line of management in modern science includes Analgesics, Stool softeners, Bulk laxatives and local application like Glyceryl trinitrate ointment. Surgical interventions includes Lord's anal dilatation, Posterior fissurectomy and Anal sphincterotomy<sup>7</sup>.

All these treatments have their own limitations and side effects. Acharya Sushruta as mentioned Anuvasana basti with ghritha manda or oil processed with Yastimadhu as line of treatment in Parikartika<sup>8</sup>. The condition demands innovative techniques for its management. Many techniques have been tried, each by no means better than other. There is always a need for the cost effective and patient friendly method for Parikartika.

## 2. Materials and Methods

### 2.1 Trial design

This study was designed as a single-blind, randomized controlled clinical trial. Ethical clearance was obtained from Institutional Ethical Committee (IEC) of SVM Ayurvedic Medical College, Ilkal, Karnataka. Written informed consent was obtained from all participants in the local language prior to enrollment and commencement of study related procedures.

## 2.2 Participants criteria

### 2.2.1 Inclusion criteria

The diagnosis was made based on the symptoms like *Toda* (Pain) and *Daha* (Burning sensation) and *Asrik srava* (Bleeding per rectum). Patients aged between 18 to 60 years, of both the genders were included in the study. Fissure-in-ano at Midline Posterior or Midline Anterior or Both were considered.

### 2.2.2 Exclusion criteria

Patients diagnosed with Chronic Fissure-in-ano; secondary to Ulcerative colitis, Crohn's disease and syphilis; associated with Haemorrhoids, Fistula-in-ano Carcinoma rectum and Peri-anal abscess; patients suffering from any systemic disorders were excluded.

### 2.2.3 Settings and locations for data collection

A minimum of 40 patients, suffering from symptoms of *Parikartika* and fulfilling the above- mentioned criteria were randomly selected from the OPD of S.V.M Ayurvedic

Medical College's RPK Ayurvedic Hospital, Ilkal. These patients were randomly allocated to Group A and Group B, with 20 patients in each group.

### 2.2.4 Interventions

Patients allotted to Group A received *Guduchi Taila Pichu* for a duration of 15 days, while the patients in Group B received *Yastimadhu Taila Pichu* for the same duration both the group received *Triphala Churna* 3gm BD as *Vatanulomana*.

### 2.2.5 Procedure

Patient is advised to take warm water sitz for a period of 15 minutes and then made to lie in Lithotomy position. Per rectal examination is done and position of fissure is noted. A sterile gauze is soaked in *Guduchi Taila* / *Yastimadhu Taila* and it is placed at anal verge and advised the patient to keep it. About the procedure, it is explained to the patient and advised to keep the *Pichu* at anal verge by himself for 15 days twice a day.



Figure 1: Procedure of Pichu Dharana

### 2.2.6 Outcomes

The outcomes were measured using subjective parameters. Pain intensity was assessed using the Visual Analogue Scale. Burning and Bleeding were graded on a scale from Grade 0 to Grade 4. Observations were noted at the baseline (1<sup>st</sup> day), and subsequently on 15<sup>th</sup> and 21<sup>st</sup> day after the treatment.

### 2.2.7 Sample size and randomization

A two-sided test was planned with a level of significance set at 5% and a power of 80% to detect significant differences. A total sample size of 40 subjects was calculated to detect an effect size of 0.47. This yielded a statistical power of 80.76%. After accounting for dropouts, 40 patients remained and were divided into two groups (n=20 per group) using simple random sampling via the lottery method.

### 2.2.8 Statistical methods

Intra-group comparisons were conducted for quantitative parameters using Wilcoxon signed Rank test, and the inter-group comparisons were performed using Mann Whitney U test. Hypothesis testing was performed for each parameter,

and results were interpreted accordingly. The level of significance was maintained at 0.05. Appropriate summary statistics, including mean, Standard Deviation, and W-values were calculated. To compare outcomes between Group A and Group B, Mann Whitney U test was used.

### 2.2.9 Blinding

Evaluator-blinded data collection was maintained throughout the study. The outcome variables related to the interventions were documented and statistical analysis was also performed in a blinded manner.

## 3. Results

### 3.1 Demographic detail and baseline data

All the demographic and baseline data of the participants were evaluated, and the results indicated no significant difference between Group A and Group B in terms of patients' age, gender, religion, socio-economic status, inhabitation, diet, sleep, *Koshta*, *Prakurti*, disease duration

and history of other illnesses. No patient underwent concomitant treatments during the study period.

### 3.2 Outcomes and estimation

Mann Whitney U test was used to compare outcomes between Group A and Group B. As observed in Table 1, the *P* value for the parameters is less than 0.05. Therefore, we

conclude that there is a statistically significant difference between Group A and Group B in the management of *Parikartika*. Furthermore, the average percentage of improvement in Group A was 76.24%, which is notable higher than the 69.74% observed in Group B. This suggests that intervention in Group A was more effective than that in Group B.

**Table 1:** Effect of Interventions on following parameters in Group A and Group B.

Parameter	Group	Mean of Ranks	% Improvement	Mann Whitney U	<i>P</i> -value	Remarks
Pain	A	20.23	57.1%	146	0.142	Not significant
	B	20.78	55.6%			
Bleeding	A	22.9	100%	152	0.200	Not significant
	B	18.1	87.5%			
Burning	A	21.85	81.6%	173	0.471	Not significant
	B	19.15	75.6%			
Itching	A	20.23	45%	194.5	0.888	Not significant
	B	20.78	47.5%			
Size of ulcer	A	24.55	97.5%	119	0.029	Significant
	B	16.45	82.5%			

## 4. Discussion

*Pichu* is a safe, economical and patient-friendly, local therapeutic procedure that can be conveniently applied at the required site of treatment. As the drug remains in contact with the affected area for a prolonged duration. *Pichu Dharana* facilitates drug action primarily through local cellular absorption and is easy to administer. and cost effective. And it can be placed in desired position or according to site of treatment. *Guduchi* has *Tikta*, *Kashaya rasa* and *Ushna Veerya* helps in reducing pain and burning

sensation at the fissure site. The *Guru*, *Snigdha guna* and *Madhura Vipaka* provide sustained oleation to anal mucosa and thereby easing pain during defecation. Owing to its *Shothahara* property, *Guduchi* helps in minimizing local inflammation, its antimicrobial action prevents secondary infection at fissure site aiding faster recovery. *Guduchi taila* pacifies *Vata*, is *Vrana ropaka* and helps in regulating *vedana* and *rookshata*. Thus, *Guduchi Taila Pichu* plays a significant role in the management of Acute fissure with symptomatic relief.



(A)



(B)

**Figure 2:** Clinical appearance of Fissure-in-ano (A)Before treatment and (B)After treatment

## 5. Conclusion

The following conclusions can be drawn based on the research undertaken on *Guda Pichu* at R.P. Karadi Ayurvedic Hospital, Ilkal. The diseases *Parikartika* and *Fissure-in-ano* show similarity in their signs and symptoms. *Parikartika* is one of the *Gudagata vikara*. The *dosha* entities involved in this disease are *Vata* and *Pitta*. *Atisara* and *Malabaddhata* are the two main causative factors for causing *kshata* in *Guda* leading to *Toda*, *Daha* and *Asriksrava*. Sedentary lifestyle irregular and inappropriate diet and prolonged sitting are identified as the precipitating factors in the pathogenesis of *Parikartika*. The condition appears more prevalent in the age group of 20-29 years and was same in both the genders, although this may be

influenced by the small sample size. In cases of *Parikartika*, drugs possessing *Vranahara*, *Tridoshashamaka* and *Dahaprashamana* properties should be administered. Considering this, *Guduchi Taila Pichu* and *Yastimadu Taila Pichu* were administered in this study. Clinically, upon comparing overall responses, Group A i.e., *Guduchi Taila Pichu* showed the most favourable response (76.24%).

### Conflict of interest

The Authors declare no conflict of interest.

### References

- [1] Agnivesha. Charaka Samhita. Edited by Shukla V, Tripathi RD. Varanasi: Chaukhambha Sanskrit

- Pratishthan; 2015 p.926.
- [2] Agnivesha. Charaka Samhita. Edited by Shukla V, Tripathi RD. Varanasi: Chaukhambha Sanskrit Pratishthan;2015 p.926.
- [3] Sushruta. Sushruta Samhita. Edited by Shastri AD. Varanasi: Chaukhambha Sanskrit Sansthan; 2020 p.307.
- [4] Sushruta. Sushruta Samhita. Edited by Shastri AD. Varanasi: Chaukhambha Surbharati Prakashan; 2020 p.187.
- [5] Vriddha Jivaka. Kashyapa Samhita. Edited by Sharma H. Varanasi: Chaukhambha Sanskrit Series; 2008 p.299.
- [6] Williams NS, Bulstrode CJK, O'Connell PR, editors. Bailey & Love's Short Practice of Surgery. 26th ed. London: CRC Press; 2013 p.1248.
- [7] Das S. A Concise Textbook of Surgery. 11th ed. Kolkata: Dr S Das Publications; 2020 p.1083.
- [8] Sushruta. Sushruta Samhita. Edited by Shastri AD. Varanasi: Chaukhambha Surbharati Prakashan; 2020 p.187.