



# “A CLINICAL STUDY TO EVALUATE THE EFFICACY OF GOURYADI GHRUTA AS EXTERNAL APPLICATION IN THE MANAGEMENT OF PARIKARTIKA W.S.R TO FISSURE-IN-ANO”

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## ABSTRACT

Ayurveda is often called as “Mother of All Healing”. Parikartika is an Ano rectal disease described in our Ayurveda samhitas. It is derived from Sanskrit word ‘parikr’ which means all around; and ‘karthanam’ means excessive cutting pain around the anus. Acharya Sushruta has described the term ‘parikartika’ as a condition of guda (anus) where cutting and burning pain is present. Guda parikartika has been mentioned by Acharyas in Virechana & Vasti Vyapat and as a Complication of vatajatisara and due to excessive use of Yapana vasthi . Fissure in ano is an elongated ulcer in the long axis of lower anal canal . It is a very common and painful condition mainly due to modern life style and food habits. The symptoms of fissure resembles with parikartika mentioned in ayurvedic classics

The study was taken up to investigate the potential of Gouryadi ghruta and to establish its significant effect on parikartika. It was a clinical study, 30 patients were selected as per diagnostic and inclusion criteria. The patients were given 10ml of *gouryadi ghruta* as anal infiltration , followed by pichu for 14 days. The assessment of objective and subjective criteria were done on before treatment (1<sup>ST</sup> day), after 3, 7,11,14,21,28,35,42,49,56,63 days.

The outcome of treatment after 60 days were statistically significant in subjective parameters like pain, burning sensation, bleeding, pruritus ani, sphincter spasm, tenderness, constipation and objective parameters like size of ulcer, and discharge.

The study confirms that *Gouradi ghruta* is effective in management of *parikartika*

## Key word:

*Parikartika, Gouryadi ghruta, Fissure in ano.*

## INTRODUCTION

Ayurveda is considered to be the oldest healing science. In Sanskrit Ayurveda means 'The life of science'. It is often called as "Mother of All Healing". *Parikartika* is an Ano rectal disease described in our Ayurveda samhitas. It is derived from Sanskrit word 'parikr' which means all around; and 'karthanam' means excessive cutting pain around the anus. Acharya Sushruta has described the term '*parikartika*' as a condition of *guda* (anus) where cutting and burning pain is present. *Guda parikartika* has been mentioned by Acharyas in *Virechana & Vasti Vyapat*<sup>1</sup> and as a Complication of *vatajatisara* and due to excessive use of *Yapana vasthi*<sup>2</sup>. Acharya Vagbhata has mentioned *parikartika* as a complication of *Vataja atisara*<sup>3</sup>. Kashyapa has described *parikartika* types in the context of *garbhini chikitsa*<sup>4</sup>.

Fissure in ano is an elongated ulcer in the long axis of lower anal canal<sup>5</sup>. It is a very common and painful condition mainly due to modern life style and food habits. The symptoms of fissure resembles with *parikartika* mentioned in Ayurvedic classics. Hence this disease can be compared to Fissure in ano. Ano-rectal disorders are progressively increasing in the society. It affects all age groups with an equal incidence irrespective of sex<sup>6</sup>. Few important causes are sedentary life style, irregular and inappropriate diet, prolonged sitting and psychological disturbances like anxiety, depression etc. These above mentioned causes result in derangement of *Jataragni* (power of digestion) which leads to all *koshtagatarogas*, hence ano-rectal disorder also. The hard stool so formed due to *malabandhata*, while passing through anus produces trauma to anal valve and it results in the genesis of anal fissure. Signs and symptoms of anal fissure include- pain sometimes severe during bowel movements, pain after bowel movements that can last upto several hours, bright red blood on stool or toilet paper after a bowel movement, a visible crack in the skin around the anus.

The present treatment modalities for fissure include lateral sphincterotomy, chemical sphincterotomy, topical anaesthetics, botulinum injections etc which has many untoward effects.

*Parikartika* can be effectively managed through Ayurvedic therapeutics without any complication. Most of the Acharyas have indicated *ghrita*, *madhu*, *tilakalka* and *yashtimadhu* for this condition along with other drugs for local application. In *Gadanigraha* Acharya states that *ghrita* prepared with *Gouryadi* is good *vranaropaka*<sup>7</sup>. More over the drug in the medium of *Ghrita* gives good lubricating action thus relieving muscular spasm.

**STUDY DESIGN** – It is an open clinical study

### DESIGN OF THE STUDY :

- Study Type : Interventional
- Estimated Enrolment : 30 participants
- Allocation : Non – Randomized
- End point classification : Efficacy study
- Intervention Model : Single group
- Masking : Open label study
- Primary Purpose : Treatment

### Sources of Data:

**Sample Source** : Patients with classical features of *Parikartika* had been selected from OPD/IPD dept in KAMC Mangalore

**SAMPLE SIZE** : Total 30 patients fulfilling the diagnostic and inclusion criteria of either gender was selected for the clinical study

## SELECTION CRITERIA

### A) DIAGNOSTIC CRITERIA

Diagnosis was made on the basis of Lakshanas of parikartika Viz. Vedana (pain) , Daha (Burning sensation), Kandu (Itching) , Shopha (Edema), Shonita Srava (Bloody discharge)

### B) Inclusion Criteria :

- Patients with clinical signs and symptoms of Parikartika as explained in Ayurvedic Classics.
- Patients of age group between 20-50 years.
- Selection of patients is done irrespective of sex and religion.
- Patients with parikartika along with systemic diseases like hypertension and diabetes under control.
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### C) Exclusion Criteria:

- Parikartika secondary to Ulcerative colitis , tuberculosis, syphilis, CA rectum, crohn's disease
- Inflammatory bowel diseases and other systemic disease pertaining to colo-rectum will be excluded from the study
- Patients with fistula in ano and haemorrhoids
- Pregnant woman and immune suppressed patients

### D) Intervention :

30 patients were selected as per diagnostic and inclusion criteria. The patients were given 10ml of Gouryadi ghruta as anal infiltration , followed by pichu for 14 days..

### Selection of drug – Pharmaceutical source

The formulation selected for research work was prepared in authentic GIP Certified Pharmacy of Karnataka Ayurveda Medical College

### Study duration and follow up:

The total duration of study was 14 days of active intervention. The assessment of objective and subjective criteria were done on before treatment (1<sup>st</sup> day), after 3, 7,11,14,21,28,35,42,49,56,63 days.

### Assessment criteria:

#### Subjective parameters

- Pain
- Constipation
- Burning sensation
- Bleeding
- Pruritus ani

#### Objective parameters

- Sphincter spasm

- Tenderness
- Discharge

### Investigations:

HB% :  
 DC :  
 RBS :  
 TC :  
 OTHER (IF ANY)

### OBSERVATION AND RESULTS:

The observations give a detailed descriptive analysis about all the 30 patients suffering from Parikartika according to age, sex, religion, education, socio-economic status, marital status, occupation, ahara, vyayama, prakrithi, sthana

### Statistical analysis of Subjective and Objective Parameters

PARAMETERS	MEAN RANK			P-VALUE
	BT (DAY-1)	AT (DAY-14)	AF (DAY-63)	
PAIN	11.70	5.55	5.05	<0.001
CONSTIPATION	10.55	5.88	5.88	<0.001
BLEEDING	8.27	6.27	6.27	<0.001
BURNING SENSATION	11.73	5.32	5.15	<0.001
PRURITUS	7.50	6.30	6.30	<0.001
SPHINCTER SPASM	11.08	5.08	5.08	<0.001
TENDERNESS	11.13	5.40	5.40	<0.001
DISCHARGE	7.05	6.45	6.45	<0.001
SIZE OF ULCER	10.00	6.37	4.18	<0.001

### DISCUSSION

#### Discussion on Disease:

In charakSamhita it describe as complication of Virechana Vyapad (therapeutic purgation). In Susruta Samhita it describe as Bastivypad . Kashyapa mention's it as Garbhini Vyapad (Disease occurs in Pregnancy).

Fissure-in-ano has become most common and painful condition in ano-rectal disease. This is a longitudinal ulcer in anal canal posteriorly situated in majority of cases<sup>8</sup>. It is commonly seen in young age people and pregnant women. It is very painful because of injury to somatic nerve supply to the anal region. The predominantly posterior mid line location of fissure has been explained by posterior angulation of anal canal, relative fixation of anal canal posteriorly, divergence of fibres of external sphincter muscle posteriorly, and the

elliptical shape of the anal canal. In Ayurvedic samhita this Parikartika is described in different place. It is also found as a symptom in conditions like Atisara, Arsha, Garbhiniyapath, grahani etc. hence parikartika can be interpreted as a disease condition where there is a cutting type of pain in and around guda.

### Discussion on Results:

- a) Effect on Pain: Statistical analysis showed that the Mean Rank on 1st day before treatment was 11.70 for pain. It was reduced to 5.55 after treatment and reduced to 5.05 after follow up. Statistically there is highly significant change ( $P < 0.001$ )
- b) Effect on Constipation Statistical analysis showed that the Mean Rank on 1st day before treatment was 10.55 for constipation. It was reduced to 5.88 after treatment and after follow up mean Rank was 5.88. Statistically it is highly significant ( $P < 0.001$ ).
- c) Effect on Bleeding Statistical analysis showed that the Mean Rank before treatment (1st day) was 8.27 for bleeding. It was reduced to 6.27 after treatment and 6.27 after follow up. Statistically there is highly significant change ( $P < 0.001$ ).
- d) Effect on Burning sensation Statistical analysis showed that the Mean Rank on 1st day before treatment for burning sensation was 11.33. After treatment it was reduced to 5.32 and reduced to 5.15 after follow up. Statistically there is highly significant change ( $P < 0.001$ )
- e) Effect on Pruritus Statistical analysis showed that the Mean Rank on 1st day before treatment for pruritus was 7.50. After treatment it was reduced to 6.30, after follow up the mean rank was 6.30. Statistically it is highly significant ( $P < 0.001$ )
- f) Effect on Sphincter Spasm Statistical analysis showed that the Mean Rank on 1st day before treatment for sphincter spasm was 11.08. After treatment it was reduced to 5.08 and after follow up the mean rank was 5.08. Statistically it is highly significant ( $P < 0.001$ )
- g) Effect on Tenderness Statistical analysis showed that the Mean Rank for tenderness on 1st day before treatment was 11.13. It was reduced to 5.40 after treatment and 5.40 after follow up. Statistically there is highly significant change ( $P < 0.001$ )
- h) Effect on Discharge Statistical analysis showed that the Mean Rank for discharge on 1st day before treatment was 7.05. It was reduced to 6.45 after treatment and 6.45 after follow up. Statistically there is highly significant change ( $P < 0.001$ )
- i) Effect on Size of Ulcer Statistical analysis showed that for effect on size of ulcer the Mean Rank on 1st day before treatment was 10. After treatment it was reduced to 6.37. After follow up it was reduced to 4.18. Statistically there is highly significant change ( $P < 0.001$ )

### Probable action of Gouryadi Ghruta:

Among 21 drugs of gouryadi ghruta, 7 drugs are having seetha veerya which helps in reducing burning sensation and bleeding, and 14 drugs are having ushna veerya. Ushna veerya is having pachana property as per Susrutha and is mentioned as pachanam vranadinaam. Among 21 drugs 17 drugs are having pitta shaman property associated with either Vata and Kapha Dosha Shamana. Also drugs like Aswatha, Udumbara, and jati are having both vrana sodhana and vrana ropana property. The drugs of Gouryadi ghruta by virtue of their properties do vrana sodhana, and ropana, thus helping in healing wound rapidly.. Ghruta acts as snehana and does vatanulomana, there by relieving constipation. Thus the medicine administered through anal route has shown significant result in healing of fissure in ano.

## CONCLUSION

From the observations it was seen that the incidence of the disease was more in people who were non vegetarians. We can see that constipation is one of the main causes of Parikartika. Though there are many causes for constipation, dietary habits play a major role. The lack of soluble fibre in the diet is a main concern in non-vegetarian food.

Fissure in ano can be actively managed without surgery with effective ayurvedic medicaments. Gouryadi ghruta administered as anal infiltration followed by pichu has shown significant result in the management of fissure in ano.

The outcome of treatment after 60 days were statistically significant in subjective parameters like pain, burning sensation, bleeding, pruritus ani, sphincter spasm, tenderness, constipation and objective parameters like size of ulcer, and discharge.

The study confirms that *Gouradi ghruta* is effective in management of *parikartika*

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