

## CLINICAL STUDY TO EVALUATE THE LOCAL EFFECT OF DOORVA GHRITA IN MANAGEMENT OF PARIKARTIKA

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**ABSTRACT :** Acharya Sushruta has described the term '*Parikartika*' as a condition of *Guda* (anus) where cutting and burning pain is present. *Parikartika* (fissure- in- Ano) is very common and painful condition. The factors responsible for causation of *Parikartika* are found in various texts as *Vamana – Virechana Vyapada, Basti Karma Vyapad and Upadrava of Atisara, Grahani, Arsha, Udavarta* etc. According to modern treatment of Acute fissure-in-ano is painkiller, stool softner and soothing ointment.& surgical treatment is anal dilatation, sphincterotomy, fissurectomy are in vague but the complication of these procedures like recurrence, incontinence and pruritus are even more agonizing than the actual pathology. Hence, there is definite need for search of new drug or therapy in management of Acute fissure in ano. *Doorva ghrita* is having ingredients with *Vrana Shodhana and Ropaṇa* properties which can help the *Vrana* (wound) to heal rapidly. The present study was conducted to evaluate the local effect of *Doorva ghrita* in management of *Parikartika* w.s.r. to Acute fissure-in-ano. The symptoms like pain, bleeding, size of ulcer were assessed during treatment. The trial drug proved statistically significant in early wound healing. The results revealed that the estimated treatment shown significant improvement ( $p < 0.01$ ) in all cardinal sign and symptoms. However the statistical observations reveals that *Doorva ghrita* was found efficacious in management of Acute fissure in ano. The present study proved that the ancient management is safe, easily available devoid of complications and has better acceptability.

**Key words:** Sushrut Samhita ,Parikartika Chikitsa, Doorva ghrita, Acute fissure in ano.

**INTRODUCTION:** In the era of fast food, there is change or irregularity in diet and diet timings and also sedentary life style. In addition to change in diet and life style, one is always under tremendous mental stress. All these causes disturb in digestive system which results in too many diseases amongst them Ano-rectal disorders constitute an important group.

On the basis of symptoms, the disease fissure-in-ano can be compared to the disease Parikartika described in Ayurveda. Acharya Sushruta has described the term '*Parikartika*' as a condition of *Guda* (anus)

where cutting and burning pain is there<sup>[6]</sup>. According to modern treatment of acute fissure-in-ano is painkiller, stool softner and soothing ointment.& surgical treatment is anal dilatation, sphincterotomy, fissurectomy are in vague but the complication of these procedures like recurrence, incontinence and pruritus. An alarming rise in the incidence of the disease fissure-in-ano and no known satisfactory remedies evolved so far has given an impetus to find out a suitable solution, with altogether better effects, from amongst the treatments advocated by the ancient Ayurved

acharyas. Hence clinical study “To evaluate the local effect of Doorva ghrita<sup>[4]</sup> in management of Parikartika w.s.r. to Acute fissure-in-ano” was conducted.

**AIMS OF STUDY:**To study the local effect of Doorva ghrita in management of Parikartika w.s.r. to Acute fissure-in-ano.

**Type of Study:**Open non comparative clinical study.

**Source of data:**30 patients of Acute fissure in ano where selected randomly from Shalyatantra outpatient department of D.Y.Patil Ayurvedic hospital, Mumbai.

**MATERIALS & METHODS:**In the selected patients local application of Doorva ghrita was done daily for 10 days. Application of Doorva Ghrita was done with a pulp of little finger. Daily Sitz bath with a Luke warm water twice a day for 20 mins with no any oral medications. Changes in the pain, bleeding and size of ulcer shall be observed on 3<sup>rd</sup> day, 5<sup>th</sup> day, 7<sup>th</sup> day and 10<sup>th</sup> day. The raw material like Doorva was collected from herbal garden.& Goghrita was collected from local market. Its identification & authentication was done from Dravyaguna department. The drug where prepared according to textual reference in Rasa shastra Bhaishajya Kalpana Department of D.Y.Patil school of Ayurveda.& prepared Doorva ghrita standerdization was done from Late Prin.B.V.Bhide Foundation Pune.

**Gradations of Parameters: Score for symptoms (Subjective criteria)**

**1. Gudagata RaktaSrava (P/R Bleeding):**

Severe (>2 drops)	4
Moderate (1-2 drops)	3
Mild (Along with stool)	2
Streak of blood on stool	1
No bleeding	0

**2. Gudgata shool(pain):**

**Inclusion criteria:**

- 1) Patients diagnosed as having Parikartika (Acute fissure in ano)
- 2) Age- 20-60years
- 3) Sex- Irrespective of sex
- 4) Not included in other clinical trial

**Exclusion criteria:**

- 1) Age below 20 and above 60
- 2) Systemic disease like TB/ DM/ HTN
- 3) Leprosy (Any type of Kushta)
- 4) Female patients with pregnancy
- 5) Serological disease like HIV, HBsAg

**Diagnostic Criteria:**

Clinical features like Pain in ano, Bleeding per anus, Burning sensation at anus, Ulcer.

**Assessment criteria:**

A. Relief of Symptoms before and after treatment. The results will be categorized as,

Complete Relief: Above 75% Improvement

Moderate Relief: 50 To 75% Improvement.

Mild Relief : 25 To 50% Improvement.

No Relief : Below 25% Improvement.

B. Healing of Ulcer: Based on healing of Ulcer the results will be categorized as,

No change in Ulcer: No Relief

Partial healing : Moderate Relief.

C. Complete healing: Complete Relief overall assessment is done based on the improvement in subjective and objective score before and after treatment, which will be subjected to statistical analysis.

Type of Pain	Intesity	Grade
No pain	0	0
Mild	1-3	1
Modrate	4-6	2
Sever	7-9	3
Worst	10	4

### Gradation (score) of Objective parameters:

#### 1. Size of Ulcer

Grade	Observation
0	No ulcer
1	<5mm
2	5-10mm
3	10-15mm
4	15-20 mm
5	>20mm

**OBSERVATION & RESULT** On observation it has been found that, as the P value <0.001. Hence, study groups have statistically highly significant efficacy for the symptom of Gudagata Shoola

**Table no:4 Showing the mean score change of gudagata shool B.T. and A.T**

Gudagata Shoola	Before treatment		After treatment		Wilcoxon Signed Ranks Test	P
	Mean score	Sd	Mean score	Sd		
Trial	2.83	0.3790	0.1	0.3051		<0.001 <b>HS</b>

- On observation the table shows that, study groups have statistically highly significant efficacy for the symptom of Gudagata Raktsrava, as the P value <0.001

**Table no:5 Showing the Mean score Change in Gudagata raktastrava B.T. and A.T.**

Gudagata Raktsrava	Before treatment		After treatment		Wilcoxon Signed Ranks Test	P
	Mean score	Sd	Mean score	Sd		
Trial	3.26	0.5208	0.0	0.000		<0.001 <b>HS</b>

On observation the table shows that, study groups have statistically highly significant efficacy to heal the Ulcer, as the P value <0.001

Size of Ulcer	Before treatment		After treatment		Wilcoxon Signed Ranks Test	P
	Mean score	Sd	Mean score	Sd		
Trial	2.4	0.8550	0.26	0.4497		<0.001 <b>HS</b>

**Table no:6 Showing the Mean score Change in Size of Ulcer B.T. and A.T**

**RESULTS:** Over all Relief Obtained in the study are taken under the heading of Results. Relief Obtained after the clinical study are categorized into complete relief, moderate relief, mild relief and No relief.

In Gudagata Shoola 27 patients get total relief out of 30 patients.

In Gudagata Raktshrava All patients get total relief.

In Size of Ulcer 22 patients get complete healing process out of 30 patients

#### Subjective parameters:

Symptoms	Total Patients	No of Pts relieved	%	Response
Gudagata Shoola	30	27	90	Complete relief
Raktashrava	30	30	100	Complete relief

Table no :7 Showing results obtained in Subjective parameters

#### Objective parameters:

Symptom	Total Patients	No of Pts relieved	%	Response
Size of Ulcer	30	22	73.33	Moderate relief

Table no :8 Showing results obtained in Objective parameters

Above tables showing the Overall response of Doorva ghrita local application on 30 Patients of study group.

**DISCUSSION:** Parikartika is the disease characterized by cutting type of pain in the anal region. It literally means to cut circumferentially or to cut all around. The description of this condition as a disease is not found in any of the Ayurvedic texts. But the term Parikartika has been mentioned at various contexts such as complication of Virechana karma, Basti karma and also as Basti netra vyapad. Acharya Sushruta holds Rooksha and Shushka aushadha are the main cause. If ruksha Basti containing teekshna and lavana dravyas are administered in heavy dose, it may produce Parikartika. Charaka and Vagbhata opine that Parikartika is a symptom in Vataja Atisara due to trauma by hard stools.

#### Probable mode of action:

➤ The Doorva ghrita having vrana ropana, raktasthambaka and Daha shaman properties.

➤ The Doorva ghrita exhibits local effects.

➤ The effects of this procedure can be explained as following.

➤ Heals the ulcers without causing strictures.

➤ Kashaya rasa has a property of ropan which helps in the granulation of the wound, Stabilizes endothelial lining, and prevents bleeding.

➤ Smoothing effect is achieved due to Ghrita.

➤ Goghrita which itself is having samskaraanuvarti and healing properties. Samskaraanuvarti property is poentiated by go-ghrita which creat good medium for absorbtion, transport and delivers of the ayurvedic formulation to the proper area of the body. According to kaiadev nighantu-varnya, good for wounds antibacterial, yogavahi, strotovishodhan and vranashodhan and vrana ropan.

➤ Goghrita also contains vit.A,D,E,and K. Vit A and K are antioxidant and are helpful in preventing oxidatin injury to the body. Vit. K keeps

epithelial tissue of the body intact which is very useful of wound healing. Liolenic acid helps in granulation.

➤ Doorva showed analgesic activity because, Acetic acid which causes algesia by liberation of endogenous substances, which then excite the pain nerve endings.

#### Discussion related to Disease:

1. **Gudagata shoola:** In study group, all patients had this symptom. The pain is due to Vibandha. The hard stool causes trauma to the anal mucosa resulting into pain. Trauma of hard stool will in turn provoke vata dosha. In Gudagata Shoola 27 patients (90%) get total relief out of 30 patients.

2. **Gudagata raktashrava:** All 30 patients had gudagata raktashrava. Due to Vibandha the Kathina mala causes laceration in the ulcer. From these lacerated wounds bleeding occurs. When laceration is superficial streak wise bleeding was seen. In deep laceration drop wise or syringing type of bleeding is observed.

3. **Size of ulcer:** All patients had size of ulcer 10mm in average. After treatment mean size of ulcer reduced to 4mm in just 10 days.

#### CONCLUSION:

- It is very clear from the results that shows significant improvement ( $p < 0.01$ ) in all the cardinal sign & symptoms.
- In the present study total 30 patients were selected, which is a satisfactory sample size in a short term Research work.
- Majority of the patients were in the age group of 30-39 years (43.33%), males, poor class, non vegetarians (mixed), Persons having mandagni, and the individuals indulging themselves in laborious type of work.

- Pain, which is the most evident, and presenting symptom of fissure-in-ano can be relieved much earlier completely by local application of Doorva ghrita.

- Rakta Srava, can be effectively controlled within 3- 4 applications of Doorva ghrita. Thus from the present study it can be concluded that local application of Doorva ghrita imparts very good local effect in the patients of Parikartika w.r.t. acute fissure-in-ano.

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