

**CLINICAL EFFICACY OF JATYADI TAILA IN PARIKARTIKA (FISSURE-IN-ANO)****Dr. Sanghamitra Samantaray<sup>\*1</sup>, Dr. Radhakrishna Bishwal<sup>2</sup> and Dr. Swapnil Singhai<sup>3</sup>**<sup>1</sup>Associate Professor, Department of Shalya Tantra, SKSS Ayurveda Medical College, Sarabha, Ludhiana.<sup>2</sup>Professor, Dept. of Shalaky Tantra, Uttarakhand Ayurved University, Gurukul Campus, Haridwar,<sup>3</sup>Professor, Dept. of Kayachikitsa, Uttarakhand Ayurved University, Gurukul Campus, Haridwar,**\*Corresponding Author: Dr. Sanghamitra Samantaray**

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**ABSTRACT**

Parikartika is a disease characterized by severe agonizing pain during and after defecation which lasts for some time and associated with mild to moderate bleeding. It is a symptom where cutting type of pain is the major criteria in the ano-rectal region, which is also common in anal fissure, so the fissure-in-ano can be include under Parikartika but all Parikartika is not anal fissure. Parikartika is produced by Vyadhi Nimittaj or Vaidya Nimittaj plays a major role in causation of this disease. It is produced after a disease or during the stage of disease or by inexperienced Vaidya during the wrong conduction of therapy. Pregnant ladies are more sufferer of this disease especially the primi-para in the anti-natal and post-partum period. According to modern science the fissure-in-ano is cured by the surgical management which leads to other complications to the patient. According to Ayurveda there are various drugs of different properties which will useful for treating the disease. Medicinal treatment is easier rather than the surgical. Ayurveda can provide permanent cure for the disease. The aim of treatment is Sampraptivighatan or to reduce the strength of Vyadhighatka. Total 30 patients diagnosed as Parikartika of any socio-economic status, age group of 18-45 years and irrespective of sex were randomly selected. The patients were treated with Jatyadi Taila in the form of local application for four weeks. The outcome revealed a better therapeutic efficacy of Jatyadi Taila in the whole symptom of Parikartika without any adverse effects.

**KEYWORDS:** Fissure-in-ano, Jatyadi Taila, Parikartika.**INTRODUCTION**

Parikartika as the name suggests is a condition which is related to 'Kartanvat Vedana' around the Guda region i.e. cutting type of pain at anal region.<sup>[1]</sup> The most prominent symptom of this condition includes severe agonizing pain during and after defecation which lasts for some time and associated with mild to moderate bleeding. Parikartika is a term which has been found in Bruhatrayi not as a separate disorder, but as a complication of other diseases like diarrhea, fever and complication of Basti and Virechan Chikitsa. Description of this condition is very much matches with fissure-in-ano of modern science when it is limited to anal region. Some authors have given it the name as 'Guda-vidar'.

Acharya Sushruta has described it as a complication of other diseases or produced by the Vaidya while treating for other diseases.<sup>[2]</sup> He has also described its treatment. It seems that he did not consider this disease have any significance which required surgical intervention, because it should be cured by local medicaments only.

Charakacharya<sup>[3]</sup> and Vagbhattacharya<sup>[4]</sup> have described about the treatment of Parikartika in details. Kashyap has

described the full details of its various types and treatment.<sup>[5]</sup> Sharangdhar Samhita has also described it as a complication of excessive emesis.<sup>[6]</sup>

**OBJECTIVES**

1. Conceptual study of Parikartika with special reference to fissure-in-ano.
2. To evaluate the efficacy and mode of action of Jatyadi Taila in Parikartika.
3. To study the nature of disease and its changes during the course of treatment.

**METHODOLOGY OF THE RESEARCH WORK**

The research study entitled "Clinical Efficacy of Jatyadi Taila in Parikartia (Fissure-in-ano)" was an observational clinical trial done with Jatyadi Taila.<sup>[7-10]</sup>

**Methods of collection of Data**

- A clinical study of patients attending the Shalya OPD was made and patients fulfilling the criteria of diagnosis as per the research paper were selected for the study.

- A clinical evaluation of patients was done by collection of data through information obtained by history, local examination, and laboratory tests including radiological investigations to rule out other pathological conditions.

#### Inclusion Criteria

- Patients with classical features of Parikartika (fissure-in-ano) explained in texts.
- Patients of any socio-economic status, both sexes and all ethnic origins.
- Patients with age group of 18-45 years.
- Both fresh and previously diagnosed cases were selected.

#### Exclusion Criteria

- Patients with uncontrolled metabolic and other systemic disorders.
- Patients suffering from fissure-in-ano due to any secondary cause.
- Psychiatric illness and pregnant women.
- Patients having Malignancy, Sentinal tag, Ulcerative colitis, Crohn's disease, Syphilis, Tuberculosis, HIV, Hepatitis and past rectal operation.
- Patients having surgical intervention were excluded.
- Patients not willing for local application.

#### Criteria for Selection of Drug

Jatyadi Taila has been mentioned in the treatment of boils, wounds, burns, piles and fistula. Jatyadi Taila mentioned by Acharya Sharangdhara mainly contains – Jati – *Myristica fragrans*, Nimba – *Azadirachta indica*, Patola – *Stereospermum suaveolens*, Naktamala – leaves of *Pongamia pinnata*, Sikta – Honey bee wax, Madhuka – *Glycyrrhiza glabra*, Kushta – *Saussurea lappa*, Haridra – *Curcuma longa*, Daruharidra – *Berberis aristata*, Manjishta – *Rubia cordifolia*, Katurohini – *Picrorhiza kurroa*, Padmaka – *Prunus puddum*, Lodhra – *Symplocos racemosa*, Abhaya – *Terminalia chebula*, Nilotpala – *Nymphaea stellata*, Tutthaka – Copper sulphate, Sariva – *Hemidesmus indicus*, Naktamala beeja – Seeds of *Pongamia pinnata*, Taila – Sesame oil – 768 ml, Water – 3.072 liters.<sup>[11]</sup>

The ingredients of Jatyadi Taila like Haridra, Karanja are Kushthaghna and Krimighna, and hence it can be attributed to check wound infection. The Neem and Daruharidra of Jatyadi taila are proven drugs to check bacterial growth and promotes wound healing. It helps in soothing the area, remove slough from wound and ultimately reduces pain.<sup>[12]</sup>

Panchasakar churna acted as Anulomaka (laxative) to evacuate the faeces easily and smoothly.<sup>[13]</sup>

#### Treatment Schedule

Jatyadi Taila - A cotton swab, dipped in the oil is placed over the wound or blisters for about 15 min, twice a day after defecation.

Panchasakar churna – 3gm BD with luke warm water.

- Sitz bath with Luke warm water twice daily.

**Total Duration of treatment** – 28 days, follow up after 7 days.

**Diet Regimen** - While prescribing the diet of the patients, concept of Pathya-Apathya related to Guda Vikar, Udar Vikar, Vibandh was kept in mind; light fiber diet was advised as per the status of Agni.

#### Diagnostic Criteria

An elaborate case paper incorporating the points of history taking and physical examination was prepared. It mainly emphasized on signs and symptoms of Parikartika (Fissure-in-ano). Routine laboratory investigation like CBC, RBS, Lipid profile, RFT, LFT, Urine test and radiological investigation like X-ray, CT scan, MRI was made to rule out other pathological conditions.

**Research Design** - It was an observational clinical study, patients were assigned into single group consisting of 30 patients excluding dropouts with pre, mid and post test study design.

**Criteria for Assessment** - The assessment was made before and after the treatment on scoring of signs and symptoms of Parikartika (Fissure-in-ano). Results were analyzed statistically as per the assessment chart. Scoring pattern was developed according to severity of symptoms.

#### Burning pain

- 0- No burning pain.
- 1- Patients complains of pain only during interrogation.
- 2- Patients complain of pain during and after defecation which is relieved after some time without medicine.
- 3- Patient complains of pain during and after defecation for some hours and relieved only with some medicine.
- 4- Patient complains of pain that is sour all through the day hampering his normal routine work.

#### Cutting pain

- 0- No pain.
- 1- Patients complain only when interrogated and pain is relieved after defecation immediately on its own.
- 2- Patients complain of pain during after defecation for few hours but pain is relieved without medicine and not hampers normal routine.
- 3- Patient complains of executing pain during and after defecation for few hours, but pain is relieved only with some medicine and not hampers normal routine.
- 4- Patient struggles due to pain all the daylong and his normal routine is hampered and he had drastic medicine for same.

**Bleeding**

- 0- No bleeding.
- 1- Bleeding along with defecation streak wise only over the stool/noticed on fissure rarely.
- 2- Drop wise bleeding during after defecation 0-10 drops occasionally.
- 3- Drop wise bleeding during and after defecation 10-20 drops stopped.
- 4- Profuse bleeding drop wise or stream wise amounting more than 20 drops in each defecation.

**Itching**

- 0- No itching.
- 1- Patients complain only when asked.
- 2- Once or twice in a day relieved with sit bath.
- 3- Patients complain of itching sensation many often in a day and discomfort.
- 4- Severe and constant itching sensation all the day long.

**Tenderness**

- 0- No tenderness.
- 1- Pain on deep palpation.
- 2- Pain tenderness on light pressure.
- 3- Pain on touch.
- 4- Patient does not allow palpation due to pain even on touching of under clothes and difficulty in sitting.

**Inflammation**

- 0- No inflammation.
- 1- Very less inflammation only on the redness found edges and base of ulcer revealed on examination.
- 2- Redness and raise in temperature in surrounding 1-5mm of tissue.
- 3- Redness raised temperature all around the anus but no loss of function.
- 4- Same redness, swelling and in duration of whole circumference of anal aperture and loss of function.

**Sphincteric spasm**

- 0- No Spasm.
- 1- Spasm revealed on examination.
- 2- Severe spasm and lightly punctured anal aperture and patient complain of not able to pass flakes.

**Discharge**

- 0- No discharge.
- 1- Patient complains only on interrogation occasional discharge.
- 2- Discharge evident on examination and patient complains of often feeling of wetness.
- 3- Patient complains of daily feeling of wetness but no pruritus ani or soiling of under cloth.
- 4- Patient complains soiling of under clothes and form pruritus ani on examination.

**Swelling**

- 0- No swelling
- 1- Slight swelling of the edges of fissure.

- 2- Swelling of surrounding tissue around 5 mm of the fissure.
- 3- Swelling of the whole circumference of anal aperture but no loss function.
- 4- Swelling of anus and sentinel tag if any with tag becoming large and to cut and obstruction of flatus.

**Assessment of total effect:** The total effect of therapy was assessed as;

Assessment	Score
Complete cure	100%
Marked Relief	76%-99%
Moderate Response	51% to 75%
Mild Improvement	25%-50%
No response	Less than 25%

**OBSERVATION**

The effect of Jatyadi Taila was studied in 30 patients suffering from Parikartika (Fissure-in-ano), fulfilling the inclusion criteria. The observations were as follows: Maximum numbers of patients were obtained in the age group of 35-45 years that is 70% followed by 23.33% patients in the age group of 25-35 years and 6.67% patients in the age group of 18 to 25 years. Male patients were 73.33% and female patients were 26.67%. Most of the patients 70% were manual labors and the maximum numbers of patients 80% were from lower-middle income group. Most of the patients 86.67% were non-vegetarian. 60% of patients gave the history of illness from 1 month, and 40% gave the history of above 1 month.

**RESULTS**

The Jatyadi Taila provided a highly significant effect on the symptoms; burning pain, cutting pain, bleeding, itching, tenderness, inflammation, sphincter spasm, discharge and swelling. The relief percentage in individual symptoms of Parikartika (Fissure-in-ano) revealed a better therapeutic efficacy of Jatyadi Taila (Table 1). The overall assessment showed; most of the patients, which are 18 patients (60%) were showed moderate response, followed by 05 patients (16.67%) were completely cured and 05 patients (16.67%) showed marked relief after completion of the treatment (Table 2).

There was improvement in overall functional status after 28 days treatment with Jatyadi taila. There was no need to take any pain killer during the treatment. There was no side effect observed during the treatment as well as after the completion of treatment.

**Table 1: Effect of Therapy on symptoms of 30 patients of Parikartika.**

Symptom	BT	AT	Diff. Mean	% Relief	SD	SE	't' value	P value
Burning Pain	3.30	0.90	2.40	72.72	0.50	0.09	14.76	P<0.001
Cutting Pain	3.07	1.20	1.87	60.91	0.51	0.09	10.66	P<0.001
Bleeding	3.00	1.10	1.90	63.33	0.55	0.10	11.28	P<0.001
Itching	2.93	1.13	1.80	61.43	0.61	0.11	10.16	P<0.001
Tenderness	2.83	1.07	1.77	62.54	0.63	0.11	10.63	P<0.001
Inflammation	3.13	1.03	2.10	67.09	0.55	0.10	13.70	P<0.001
Sphincter spasm	1.83	0.53	1.30	71.03	0.60	0.11	10.38	P<0.001
Discharge	2.97	0.87	2.10	70.70	0.48	0.09	12.53	P<0.001
Swelling	3.03	0.97	2.07	68.31	0.52	0.10	10.46	P<0.001

**Table 2: Overall effect of Jatyadi Taila in 30 patients of Parikartika.**

Result	Number of Patients	Percentage
Complete cure	05	16.67%
Marked Relief	05	16.67%
Moderate Response	18	60.00%
Mild Improvement	02	6.66%
No Response	0	0

## DISCUSSION

Parikartika is a disease characterized by severe agonizing pain during and after defecation which lasts for some time and associated with mild to moderate bleeding. The definition of Parikartika given by Jejjata, Vijayraksita is much more applicable is here. The Parikartika is a symptom where cutting type of pain is the major criteria in the ano-rectal region, which is also common in anal fissure, so the fissure-in-ano can be include under Parikartika but all Parikartika is not anal fissure. Parikartika has almost similar symptomatology and causative factors as Fissure-in-ano. It can be concluded that Parikartika is produced Vyadhi Nimittaj or Vaidya Nimittaj plays a major role in causation of this disease. Parikartika is produced after a disease or during the stage of disease or by inexperienced Vaidya during the wrong conduction of therapy. Pregnant ladies are more sufferer of this disease especially the primi-para in the anti-natal and post-partum period. According to modern science the fissure-in-ano is cured by the surgical management which leads to other complications to the patient. According to Ayurveda there are various drugs of different properties which will useful for treating the disease. Medicinal treatment is easier rather than the surgical. Ayurveda can provide permanent cure for the disease.

In Parikartika there is dominance of Vata and Pitta Dosha causing the clinical features and for treating this disease the Vata-Pitta Shamak drugs to be used. The ingredients of Jatyadi Taila are having anti-bacterial, cooling, anti-inflammatory and it has been advocated for the treatment of traumatic wounds, Doshjanya wounds, Asthibhagna Updansa and Visarpa etc. Agni-deepak, Tridosh-shamak, Shothahar and laxative drugs are used internally. Amla Rasa Pradhan Dravya is used. Most of

these Amla Rasa Dravya are containing ascorbic acid and helpful in healing and increase the body resistance also. The Jatyadi Taila probably removes the accumulated secretions in the fissure bed, promotes healing and reduces secondary infection too. It may be due to its Vraṇa Shoodhana, Vraṇa Ropana, Stothahara and Vedanasthapana properties.

**Probable mode of action of Jatyadi Taila** - The important factors which keep a fissure-in-ano away from normal healing are constant contamination of the wound by faeces and frequent friction with the mucosa while there is continuous spasm of the sphincteric muscles. In such situation, a drug which produces a soothing effect; Vraṇa Shodhana, Vraṇa Ropana, Vedana Sthapana and Vata-pittahara action, is more suitable.

Most of the ingredients used in Jatyadi taila are Shothahara, Vedanasthapana and Ropaka. The ingredients like Neem, Haridra, Daruharidra, Abhaya, Lodhra have antimicrobial activity. Manjistha, Sariva, Karanja ingredients are having vrunashodhana (wound cleansing) property. Naktahva and Abhaya have antioxidant and wound healing properties. Katuka improves re-epithelialization, neo-vascularization and migration of endothelial cells, dermal myofibroblasts and fibroblasts into the wound bed. Jati, Patola and Sikta have vrunaropana (Wound healing) action Kushta has anti-inflammatory action. Madhuka has soothing and healing action on skin lesions topically. Nymphaea stellata has astringent and antiseptic properties. Tuttha i.e. copper sulphate induces vascular endothelial growth factor (VEGF) expression in the wound.

**Probable Mode of Action of Panchasakara Churna** - It is specially indicated for the Vibandha (constipation). The Shunthi (*Zingiber officinalis* Linn.) has Deepana, (appetizer) & Pachana (digestive) properties so found helpful to improve digestion. Senna (*Cassia angustifolia* Vahl.), Haritaki (*Terminalia chebula* Retz.) and Shatapushpa (*Fenicum vulgare*) have Anulomana (laxative) property and rendered an action of easy evacuation of stool.

## CONCLUSION

The present observational clinical study signifies the role of Jatyadi Taila in the treatment of Parikartika (Fissure-

in-ano). The patients can make significant gains in symptoms score in relatively short periods of time. Despite the limitations of this clinical study, conclude that the Jatyadi Taila is a simple and effective treatment modality for Parikartika (Fissure-in-ano) without any adverse effects.

Though this study was carried out in limited patients for a limited period, the mass study programming is needed for further huge database statistical study.

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