



# **TITLE\_ CLINICAL STUDY OF EFFICACY OF MATRA BASTI OF PANCHAVALKAL TAILA IN PARIKARTIKA W.S.R. TO FISSURE-IN-ANO**

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## **Abstract :**

Fissure-in-Ano is commonly occurring disease in modern era. It's high incidence is due to modern lifestyle changes. There is formation of wound and feeling of severe pain at anal region. Due to this, this disease is more troublesome to the patient. To cure this, we have to first identify the causative factors and the pathophysiology of this disease. It came to known that *Apana vayu* and *Vyana vayu* are Vitiated in the Fissure-in-ano i.e. *Parikartika*. So there is need of correction of this *Vata*. Modern treatment have adverse effects. So there is need of *Ayurvedic* approach to cure this disease and prevent recurrence. It is advised to give *basti* in vata dosha diseases. So present study is an attempt to study the effect of *Panchavalkal Taila basti* in *Parilartika* w.s.r. to Fissure in Ano

**Keywords : Fissure-in-ano, Parikartika, Apana vayu, panchavalkal.**

## **❖ Introduction:**

Fissure-in-ano is the commonly occurring condition showing severe pain in the anal canal. In this, there is longitudinal tear occurs over the skin of anal opening. Usual site for this is the posterior midline of anal margin.

It is usually situated below the dentate line and confined to the anoderm.<sup>1</sup> In Ayurveda, the *Parikardika vyadhi* can be correlated with Fissure-in-ano.

#### ❖ Aims and Objectives –

##### ▪ Aim:

To study the role of *Apana vayu* in *Parikartika* W.S.R.T. Fissure-in -ano.

##### ▪ Objectives:

1. To study the concept of *Parikartika* according to Ayurveda.
2. To study the concept of *Apana vayu* according to Ayurveda.
3. To study the concept of Fissure-in-ano.

##### ▪ Material and methods –

1. Literary review of *Parikartika* and *Apana vayu* in all *Ayurvedic* texts.
2. Review of available information regarding Fissure-in-ano.
3. Review of internet material, Journals, magazines and previous research papers related to this subject.

#### ❖ Review of literature:

##### ▪ Fissure-in-ano

##### • Types and Causative factors:

Generally Fissure-in-ano is of two types –

1. Primary/ Simple/ true Fissure-in-ano: In this, the tear does not cross the dentate line. This fissures are typically benign type and can be related to local trauma such as hard stools, prolonged diarrhoea, vaginal delivery, repetitive injury or penetration.
2. Secondary/ Specific – This found in patient having history of previous anal surgical procedures, Inflammatory Bowel Disease (e.g. Crohn's disease), Granulomatous disease (e.g. Tuberculosis, sarcoidosis), some infections (e.g. HIV/AIDS, Syphilis).<sup>2</sup>

##### • Pathophysiology:

Resting pressure is the pressure in anal canal which is regulated by tonicity of internal anal sphincters. This pressure is elevated to twice value in case of Fissure-in-ano.<sup>3</sup> This causes the chronicity in the Fissure-in-ano. This increased resting pressure causes searing or tearing type of pain in the anal canal during a bowel movement. After the passing of stools, the pain continues as a dull ache or there may be tightness in anal canal

lasting for several minutes to hours. But recently it is found that, the application of local anaesthetic gel does not relieve this elevated pressure and there is continuation of spasm in anal canal which leads to formation of Fissure-in-ano.<sup>4</sup>

Previously, there was assumption that spasm is due to contraction of internal anal sphincter and the best remedy for this is Lateral internal sphincterotomy (LIS) wherein there is partial division of the internal anal sphincter away from the fissure site.<sup>5</sup> However, if we record the resting anal pressure in the case of lateral sphincterotomy, the pressure reduces greatly under the influence of local anaesthesia. But this resting pressure increases rapidly after the effect of local anaesthesia passes away. So it is clear that, this increase in resting pressure is not due to internal anal sphincter contraction. Any damage to the anal mucosal causes hypersensitivity of the contact receptors of the anal – external sphincter continence Reflex, resulting in the overreaction of the reflex. This overreaction causes Contraction of internal anal sphincter. This in turn leads to increase in resting anal pressure, diminished anodermal blood flow and ischemia. This ischemia prevents anal fissure from healing.<sup>6</sup>

- **Symptoms:**

- Pain, sometimes severe, during bowel movements
- Pain after bowel movements that can last up to several hours
- Bright red blood on the stool or toilet paper after a bowel movement
- A visible crack in the skin around the anus
- A small lump or skin tag on the skin near the anal fissure

- **Parikartika:**

Parikartika, in Ayurveda, can be correlated with Fissure-in-ano. The term *Parikartika* is derived from the root word '*Parikrt*' which denotes to cut around.<sup>7</sup> *Parikartika* term is seen in many disease conditions such as *Udavarta*,<sup>8</sup> *Purvarupa* of *arsha*,<sup>9</sup> *Jirnajwara*<sup>10</sup>, *Atisara*<sup>11</sup> and *Vataj Grahani*.<sup>12</sup> It also arises due to complications of *Shodhan* karma like *Virechan karma*<sup>13</sup> and *Basti karma*.<sup>14</sup> This all above said conditions contains one common symptom, severe pain at anal region.<sup>15</sup> The causes for it can be classified into two types, namely alteration in normal bowel evacuation Physiology and iatrogenic causes.

Alteration to normal physiology of bowel evacuation occurs as hard stool in *Varchasavarta vata* or as in loose soft stool in *atisara*. It leads to severe pain with bleeding. Also it may be due to complications of giving *tikshna virechana* or *Basti* treatment in *mrudukoshtha* Patients. Iatrogenic causes mainly includes trauma to the anal region such as *Bastintra dosha*.<sup>16</sup> In both those conditions, it is caused by severe anal pain. This pain is

similar to the pain in Fissure-in-ano. This two causes leads to formation of damage to anal mucosa. The skin of anal region does not contain hairs, sweat glands or sebaceous glands like other skin. This skin contains a large number of sensory nerves that sense light touch and pain and abundance of these nerves makes Fissure-in-ano very painful.

▪ **Samprapti :**

After knowing that both hard stool and loose stool can cause injury to anal canal. Here *Vyana Vayu* and *Apana vayu* are Vitiated. The site of the wound is due to presence of these two *Vata*. *Vyana vayu* is responsible for *Gati- prasaran – Akunchana – utksepa – Avaksepa – nimesha – umesha* in the body.<sup>17</sup> Here *gati* means all the actions in the body according to *Indu*.<sup>18</sup> Thus the action of propulsion of faecal matter into the anal canal can be related to *Vyana Vata*. So vitiation of *Vyana Vata* can cause increased muscular action or for a spasmodic action.

The function of *Apana vayu* is mentioned as *Vinmutradi Nishkramankriya*.<sup>19</sup> Thus the expulsion of faecal matter through anus is a function of *Apana vayu*. Due to this, defect in normal expulsion of Faeces (action of *Apana vayu*) occurs as a result of increase spasm of anal musculature (due to increased action of *Vyana vayu*). The sequential effects of *Vyanavarta apana* is mentioned as impaired function of *Apana vayu* which leads to reversing the action of *Apana vayu* causing *Vamana, adhmaana, udvartana, gulma* in higher sites and *Parikartika* in it's own site.<sup>20</sup>

The altered bowel factors or iatrogenic factors causes *trauma* in the anal musculature resulting in the formation of wound. This initial *abhighta* to the anal musculature causes *sadyovrana* which is *agantu* hetu. This *agantu hetu* first causes vitiation of *Vata* and *Rakta*.<sup>21</sup> Site of injury is skin of anal region and skin is the main location of *Vata*. Also there is reference in the commentary that *spanshanam* means skin. In case of *Charmakilam*, *Vyana vayu* along with *Kapha dosha* causes the disease. So by this, it is clear that *Vata* situated in the skin in *Vyana vayu*. So gist is that vitiation of *Vyana vayu* causes disturbance to the function of *Apana vayu* and both together causes *Parikartika* at the same site.

❖ **Material and Methods :**

▪ **Inclusion criteria:**

1. Patients between age group of 20 to 65 years were selected.
2. Patients with fissure in ano having symptoms anal pain, anal bleeding, burning sensation and constipation was selected.
3. Patients will be selected irrespective of sex, marital status, religion, education and economical status.

▪ **Exclusion criteria:**

1. Patients presented with tubercular or any other infectious cases along with fissure-in- ano
2. Patients of fissure in ano suffering from serious systemic illness.

▪ **Preparation of drug:**

• **Panchavalkal Taila:**

- a) Vata
- b) Ashwattha
- c) Udumbara
- d) Plaksha
- e) Parisha
- f) Til taila
- g) Water

• **Method of preparation –**

*Panchavalkal Taila* is prepared as per mentioned in *Sharangadhar Samhita* as follows<sup>22</sup>

*Til taila* (4 part) heated on mild fire. Then kalka of all dravyas (Vata, Ashwattha, Udumbara, Palaksha and Parisha) (all together 1 part) was added and fried for 5 minutes. Later water (16 part) was added and heating was continued till vaporizing all content of water. After testing Taila shuddhi Lakshanas, prepared panchavalkal taila will be allowed to cool and then will be filtered. The properties of each drug is as follows:<sup>23</sup>

Dravya	Latin name	Rasa	Veerya	Vipaka	Guna	Karma
Vata	Ficus bengalensis Linn	Kashaya	Sheeta	Katu	Guru, ruksha	Vedanasthapana, Vranaropana, Raktashodhaka, Shothahara
Ashwattha	Ficus religiosa	Madhur, kashaya	Sheeta	katu	Guru, ruksha	Vedanasthapana, Vranaropana, Raktashodhaka, Shothahara
Udumbara	Ficus glomerata Roxb.	Kashaya	Sheeta	katu	Guru, ruksha	Shothahara, Vedanasthapana, Varnya, Vranaropana
Palaksha	Ficus lacor	Kashaya	Sheeta	katu	Guru,	Raktashodhaka,

					<i>ruksha</i>	<i>Shothahara, Vranaropana, Dahaprashamana</i>
<i>Parisha</i>	Thespesia populnea Soland	<i>Kashaya</i>	<i>Sheeta</i>	<i>katu</i>	<i>Laghu, ruksha</i>	<i>Sandhaneeya, Shothahara, Kushthagha</i>

- **Investigations:**

All routine investigations of blood and urine were done for all the cases. Along with this, few specific investigations were also performed.

- A. Blood examinations

CBC with ESR

BSL (R)

- B. Urine examination : routine and Microscopic

- C. Some specific Investigations

IgG for tuberculosis

Montoux test

Biopsy for fistulous tract on suspected case of tubercular fistula.

HIV for AIDS

- D. Radiological investigations

X ray chest PA view

- **Methods:**

Total 10 patients were selected and treated.

- **Treatment:**

a) *Panchavalkal tiltaila matrabasti* - 40 ml. It was given for successively 7 days. Basti was given with disposable basti pouch.

b) *Internal medicine given was*

I. Tab Triphala Guggulu 250 mg BD

II. Gandharva haritaki Churna 3 gm HS

- **Procedure –**

**Poorvakarma** – The patients was given prone position and local abhyanga (massage) with *Tilataila* was done for 10 minutes.

**Pradhankarma** – Patient was given left lateral position, 60 cc syringe was filled by *Panchavalkal taila*, oil was applied to anal region and tip of catheter. Catheter was inserted 3 cm in anus, the piston was slowly pushed till all the oil gets inside.

Slight massage was given on buttock region for 15 minutes and patient was asked to sleep in supine position for 10 minutes. The procedure was followed for 7 days.

- **Duration** –7 days

Follow up – after 7 days

- **Statistical Analysis:**

By Paired 't' test.

- **Assessment Criteria :**

### 1) Per rectal Bleeding

No bleeding	0
Very negligible bleeding	1
Scanty bleeding	2
Profuse bleeding	3

### 2)Pain

No pain	0
Severe pain	1
Moderate pain	2
Severe pain	3

### 3)Burning Sensation

No burning sensation	0
Negligible burning sensation	1
Tolerable and occasional burning sensation	2

Intolerable and continuous burning sensation	3
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#### 4)Constipation

No constipation	0
Occasional constipation with 1 day gap	1
Frequent constipation with 2-3 days gap	2
Continuous constipation	3

#### ❖ Observation and Results:

The response of treatment was observed and recorded on a case paper and data collection by clinical study.

Sr. No.	Assessment criteria	Bleeding	Pain	Burning sensation	Constipation
1.	Case 1	BT	2	2	2
		AT	0	0	1
2.	Case 2	BT	2	3	2
		AT	1	2	1
3.	Case 3	BT	2	1	0
		AT	1	0	0
4.	Case 4	BT	0	1	2
		AT	0	0	1
5.	Case 5	BT	1	1	2
		AT	0	1	1
6.	Case 6	BT	0	2	3
		AT	0	0	1
7.	Case 7	BT	2	3	2
		AT	0	1	1
8.	Case 8	BT	2	2	3



		AT	1	1	2	1
9.	Case 9	BT	3	2	2	2
		AT	1	1	1	1
10.	Case 10	BT	0	2	0	2
		AT	0	0	0	0

(BT- Before Treatment, AT- After Treatment)

### ❖ Results:

Effect of *Panchavalkal Taila basti* on cardinal symptoms of Fissure in Ano is as follows

Cardinal Symptoms	N	Mean BT	Mean AT	S.D.	S.E.	't'	P value	Result
Per rectal bleeding	10	1.4	0.4	0.667	0.211	4.7393	P<0.001	H.S.
Pain	10	1.9	0.6	0.455	0.143	9.09	P<0.001	H.S.
Burning Sensation	10	1.8	0.9	0.322	0.101	8.91	P<0.001	H.S.
Constipation	10	1.8	0.5	0.455	0.143	9.09	P<0.001	H.S.

(BT- Before treatment, AT- After treatment, S.D- Standard Deviation, S.E.- Standard Error of mean).

### ❖ Discussion and Conclusion

The knowledge of any disease can be attained by knowing the detailed pathophysiology of it. If this pathophysiology is broken, the disease can be healed early and easily. It is the best plan to cure the disease and prevent the reoccurrence of the disease. In Ayurveda, there is no detailed description available of *Parikartika*. If the burning pain causing condition is taken as injury around the anal regions, the main cause can not be identified. So to know the possible steps of persistence of this disease, the focus were done on *Vyanavarta apana*. By this, it is clear that *Parikartika* is not merely a wound but it is the cause for *Vata* vitiation and further *avarana* causes the persistence. So ideal treatment includes *matrabasti* with *shodhana & ropana* medicines.

The incidence of Fissure-in-ano is on the rise due to our modern lifestyle changes. By knowing that, this condition is caused by the combination of two factors namely *Vyana vayu* and *Apana vayu* and their role in further persistence of fissure, it can help in fast healing and preventing recurrence of the disease. Fissure-in-ano has symptoms as per rectal bleeding, pain, burning sensation, constipation etc. *Panchavalkal* has the properties like *Vedanasthapana*, *Vranaropana*, *Raktashodhaka*, *Shothahara*, *Sandhaniya*, *Dahaprashamana*. So it reduces all symptoms of Fissure-in-ano. It was proven statistically highly significant. This study has been performed in small sample size. There is need to check its effect in large sample size.

#### ❖ Bibliography:

1. Klosrerhalfen B., Vogel P., Rixen H. And Mittermayer C., Topography of the inferior rectal artery: a possible cause of chronic, primary anal fissure, *Diseases of the colon and rectum*, 1989, 32:43-52. 10.1007/BF02554625.
2. Lund J. N. And Scholefield J.H., Aetiology and treatment of anal fissure, *the British Journal of Surgery* , 1996;83:1335-44. 10.1002/bjs. 1800831006.
3. Gibbons C. P. And Read N. W., anal hypotonia in fissures cause or effect? *The British Journal of Surgery*, 1986,73:443-5.
4. Farouk R., Duthie G.S., Mac Gregor A.B. and Bartolo D. C., sustained internal sphincter hypertonia in patients with chronic ana fissure , *Diseases of the colon and rectum* , 1994,37:424-9.
5. Devi G. R. AND Sivakumar V. V., A comparative study between lateral sphincterotomy abs Diltiazem application for anal fissure regarding pain, bleeding and healing (IOSR- JDMS) e- ISSN : 2279- 0853, p- ISSN: 2279- 0861. Vol. 16, Issue 10 Ver. XI (Oct. 2017), p 1-14 [www.iosrjournal.org](http://www.iosrjournal.org)
6. Van Meegdenburg M.M., Trzpis M., Heinenan E. And Broens P. M., (2016) Increased anal basal pressure in chronic anal fissures may be caused by overreaction of the anal – external Sphincters continence Reflex, *Medical Hypotheses* , 94:25-29, doi: 10.1016/I.mehy.2106.06.005.
7. *Sushrut Samhita of Maharshi Sushruta* by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part I, page no. 187.
8. *Charak Samhita of Agnivesha* edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 624.
9. *Sushrut Samhita of Maharshi Sushruta* by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part I, page no. 307.
10. *Charak Samhita of Agnivesha* edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 97.
11. *Charak Samhita of Agnivesha* edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 466.
12. *Charak Samhita of Agnivesha* edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 370.

13. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part I, page no. 187.
14. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part I, page no.196.
15. Sushrut Samhita of Maharshi Sushruta by Kaviraj Ambikadutta Shastri , Chaukhambha Sanskrit Sansthan , Varanasi, Reprint Edition 2017, part II, page no.290.
16. Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 916.
17. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 63.
18. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 63.
19. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 63.
20. Charak Samhita of Agnivesha edited by Acharya Vidyadhar Shukla and Prof Ravidutta Tripathi, Chaukhambha Sanskrit Pratishthan, Delhi, Reprint edition 2017, Part II, page no. 719.
21. Sarth Vagbhat by Dr Ganesh Krishna Garde, Proficient Publishing house, Pune ,reprint edition 2019, page. No. 192.
22. Sharangadhara, Sharangadhara Samhita, English T by Shrikantha Murthi, Chaukhambha Orientalia, Varanasi, Madhyama Khandaa 9/58 – 60.
23. Dravyaguna vijnana by Prof. P. V. Sharma, Chaukhambha Bharati Academy, Varanasi, part 2, Reprint edition 2009.

