

## ROLE OF *DORALI, BILVA, ANANTMUL SIDHA TAIL* IN THE MANAGEMENT OF '*PARIKARTIKA*' A COMPARATIVE STUDIES WITH ANNOVATE OINTMENT

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### ABSTRACT

In the fast running life, human being is inviting many diseases because of substandard quality food i.e. '*virudhha aahara and vihara*' (incompatible food and habits) this disturbs the digestive system and causes constipation, hyper acidity, loss of appetite etc. which resulting in many anorectal diseases, *Parikartika* i.e. fissure in ano is one of them found frequently. It is the disease of anal region causing sharp agonizing and bleeding streak with stool. *Dorail, Bilva, Anantmul sidhha tail* mentioned by Acharya Kashyapa in *Khilasthan* has been selected for current pilot study. For this study the patients are randomly divided into two groups of 10 patients each. First group are treated with *Dorali, Bel, Anantmul siddha tail pichudharana* for 15 days. Other groups are treated with local Application of Annovate ointment for 15 days. After clinical study it was observed that group A has better effect in management of spasm & itching while pain & bleeding is managed better in group B. The results are encouraging.

**Keywords:** *Parikartika*, fissure, *pichudharana*, *ropan*, Annovate.

### INTRODUCTION

Today in the fast running life human being is inviting many diseases because of substandard quality food, *Viruddha Ahar-Vihar*, Contaminated food etc. These disturb digestive system and cause constipation, hyperacidity, loss of appetite etc resulting into anorectal diseases. *Parikartika* disease is one of them. In this concern Ayurveda gives requisite guideline for health than other medical sciences. Acharya Sushrut has described *Parikartika* in "*Vaman virechan vyapad chikitsa*" (treatment of side effects of therapeutic vomiting & medicated purgation) in *chikitsa sthan* <sup>(1)</sup>. Acharya Charak has also motioned *Parikartika* under heading "*Vaman Virechan Vyapad*" <sup>(2)</sup>. Acharya Vagbhat has stated *Parikartika*

in "*Arishta Lakshan*" (Unauspecious prognostic features). The major reference stated by Acharya Kashyapa is found in '*Garbhini chikitsa*' <sup>(3)</sup> (*ANC & PNC treatment*). In *Ayurvedic samhita*, the causes, symptoms and treatment of *Parikartika* are described in details. It occurs due to *heen-mithyadi-yoga* of *Virechana karma* (medicated purgation), *Bastikarma* (medicated enema) which exerts pressure on the mucous wall of *guda* and *gudanalika* <sup>(4)</sup> (anal canal). Stretching of mucous wall of *guda* and *gudanalika* results into '*shool*' (pain) and further stretching causes rupture of mucous wall and *bleeding*. It presents with various annoying symptoms, which make patient very anxious. As the name itself

suggests the main symptom is severe pain, which is cutting by scissor in character. All the *Acharyas* stated oleation therapy particularly in anal region for the treatment. According to this project, it has been undertaken to state *shodhan* (purification) and *ropan* (healing) effect of *Dorali, Bel, Anantmul sidha Siddha Tail picchu dharan* in Anal Canal. According to Acharya Kashyap, *Tridosha* are involved in *Parikartika*. *Dorali, Bel, Anantmul* is *vata* and *pitta shamak*, it relieves *vibandha* i.e. constipation, hence used in *Parikartika*. The base is *til tail*, which is *snigdha* (oily) and *vata shamak* <sup>(5)</sup>. So here, Synergism in the action of these two components takes place. Hence considering above, *Dorali, Bel, Anantmul sidha tail* is selected for present study. *Picchu dharan* is a measure adopted from *Vagbhat* and *Charak samhita*. In this study *pichu* soaked in *Dorali, Bel, Anantmul sidha tail* is placed into anus i.e. anal canal. This study is carried out with an aim for evaluation of potency of drugs i.e. *vran ropan*, keeping equilibrium of various *doshas* and promoting fissure healing.

#### **AIMS & OBJECTIVES:**

The clinical trials will be carried out for following aim and objectives:

1. To assess the effect of *Dorali, Bel, Anantmul sidha tail pichudharana* on in management pain, bleeding, spasm & itching in ‘*Parikartika*’.
2. To assess the efficacy of *Dorali, Bel, Anantmul sidha tail pichudharana* in management of ‘*Parikartika*’ in the comparison of *Annovate* ointment.

#### **MATERIALS AND METHODS:**

##### **Criteria for inclusion of patients:**

1. Patients from 18-70 yrs of age group, irrespective of sex were randomly selected.

##### **Criteria for exclusion of patients:**

1. Patient with systemic diseases like DM, TB, STD, piles, Fistula, Perianal Abscess, prolapsed rectum etc.
2. Any major complication during treatment.
3. Traumatic wound with severe complication like fracture, dislocation and severe Hemorrhage.

**Research Methodology:** 60 patients were selected randomly and divided into 2 groups:

Group A: Local Application of *Dorali, Bel, Anantmul sidha tail pichudharana* in BID for 15 days.

Group B: Local Application of *Annovate* ointment in BID for 15 days

#### **Mode of action of drug**

**A) Drug used in Group A i.e. *Dorali, Bel, Anantmul sidha tail*:** The reference of Application of *Dorali, Bel, Anantmul in parikartika* is taken from *Kashyap Samhita*. Details of each are as follows:

##### *1) Dorali (Bruhati)*

Latin Name: *Solanum Indicum*

Sanskrit- *Brahati, Vrihati, Bhantaki*.

English- Indian Nightshade

Hindi- *Barhanta, Birhatta*

*Dorali* is plant common all over India. Fruit and root contain way, fatty acids & alkaloids solanine and solanidine. Carminative, cardiac tonic and resolvent, it is useful in asthma, dry cough, difficult parturition, chronic febrile affections, colic with flatulence, worms scorpion-sting also dysuria. Root forms one at the laghupancha- mula of *Dashmula kwath*. It is seldom used alone <sup>(6)</sup>. It is regarded as diuretic, useful in dropsy and expectorant useful in cough and catarrhal infections; also diaphoretic and stimulant. Vapor of the burning seeds is a remedy for odontalgia <sup>(7)</sup>.

Properties & action –

*Rasa: Katu, Tikta*

**Guna:** Tiksna, Ruksa, Laghu

**Virya:** Ushna

**Valpak:** Katu

**Karma:** Dipaniya, Kaphavatshyamak, Vedanashyamak, Kandughna, Krumighna, Shwas-Kashar, Kushtaghna, Jwarghna

2) **Bilva:** Bilva *Aegle marmelos* Corr. (Fam. Rutaceae), an armed, medium sized tree occurring in the plains and up to 1000 m in the hills as well as cultivated throughout the country, particularly in sacred groves<sup>(8)</sup>

**Synonyms-**

**Sanskrit :** *Sriphala*

**Eng. :** Bengal Quine, Bael

**Hindi:** *Bela, Sruphal, Bel*

**Constituents –** Coumarins and Sterols

**Properties & action –**

**Rasa:** *Kasaya, Tikta, Madhura*

**Guna:** *Tiksna, Ruksa, Laghu*

**Virya:** *Usna*

**Vipaka :** *Katu*

**Karma:** *Dipaniya, Kaphahara, Vatahara, Samgrahi, Pittakara, Visaghna*

1) **Anantmul (Sariva):** Sariva a well-known drug of Ayurvedic Materia Medica has been in wide use since ancient times. In Ayurvedic texts, two varieties of *Suriva* i.e. *Shweta* and *Krishna Sariva* are grouped under *Sugandhi dravyas* aromatic drugs. They are described as having *madhura* (sweet) and *tikta rasa* (bitter), with *hime* (cooling), *snigha* (slimy) and *guru* (heavy) properties; they are useful in *agnimandya* (loss of appetite), *aruchi* (distaste), *kasa* (cough), *swasa* (dyspnoea), *jwara* (fever), *raktapradara* (menorrhagia), *vaarakta* (a type of arthritic disorder) and as a *rakta shodhaka* (blood purifier) in skin diseases<sup>(9)</sup>.

**Botanical origin:** *Hemidesmus indicus* (Linn.) (Family: *Asclepiadaceae*)

**Properties & action –**

**Rasa:** *Tikta, Madhura*

**Guna:** *Guru, Snidha*

**Virya:** *Shit*

**Vipaka:** *Madhur*

**Karma:** *Dipaniya, Vatahara, Pittashamak, Vataashyamak, Dahashyamak, Shothahar.*

**SOP's for Preparation of Dorali, Bel, Anantmul siddha tail:-**

1) *Dorali, Bel, Anantmul kalka*, 1 part

2) *Til Tail* 4 part

3) *Dorali, Bel, Anantmu kwath* 16 part

All the above ingredients were prepared and mixed. With 'Mandagni' (low flame) it is reduced to 4 parts to get siddha tail.

**B) Drug used in Group B i.e. Annovate ointment:**

**Contains:** Beclomethasone Dipropionate

IP 0.025% w/w

Phenylephrine Hydrochloride

IP 0.10% w/w

Lignocaine Hydrochloride

IP 2.50% w/w

Cholorocresol Ip (As preservative) 0.1% w/w

In aqueous cream base

**Description:** The clinical effectiveness of ANNOVATE cream is attributable to the marked local anti-inflammatory property of the corticosteroid Beclomethasone Dipropionate, the analgesic effect of Lignocaine, and the vasoconstrictor effect of Phenylephrine Hydrochloride.

**Criteria for assessment:-** It will be done by following clinical feature of fissure in ano. Gradation of complaints

### 1) **Guda Ruja/ Vedana/ Pain in Ano**

Grade	Symptom
0	No pain
1	Pain is relived within 1 hour after Defecation.
2	Pain is relieved with 4-5 hours after defecation.
3	Pain is present for whole day.

2) *Sarakta Mal pravrutti* / Bleeding

Grade	Symptom
0	No bleeding
1	Bleeding along with defecation as steak on stool
2	Drop- wise bleeding during & after defecation 0-10 drop occasionally
3	Drop-wise bleeding after defecation 10-20 drops at every defecation

3) Sphincter Spasm

Grade	Symptoms
0	Normal tone.
1	Index finger inserted with little pain.
2	Index finger inserted with moderate pain.
3	Patients does not allow PR examination.

4) Itching :

Grade	Symptoms
0	Absent.
1	Occasionally in a day.

2	Itching during and after defecation daily.
3	Continuous itching throughout day.

**RESULTS / OBSERVATIONS**

**Statistical Analysis:** The data was collected from this clinical research work and arranged for further processing by subjecting to various statistical methods and presented for early comprehension, so the obtained data on the basis of observation in each group was subject to statistical analysis in terms of paired't' test. The't' test used for paired observation before treatment (BT) and after treatment (AT). The obtained data on the basis of observation of two groups was subject to statistical analysis in terms of unpaired student's' test as number of patients were 30. For comparing results in two groups this test was done.

**Results of Clinical Trials:** Following table showing the pattern of clinical recovery in 30 patients of *Parikartika* (Fissure) treated with *Dorali, Bel, Anantmul Siddha Tail Pichudharan* in Group A

Sr. No.	Symptoms	N	BT	AT	M.D	S.D.	S.E.	T-value	P-value	%
1	Pain	30	2.5	1.2	1.3	0.596	0.111	10.77	<0.001	52.78
2	Bleeding	26	2.19	0.96	1.23	0.765	0.15	8.208	<0.001	53.85
3	Spasm	30	2.5	1	1.5	0.861	0.157	9.542	<0.001	58.33
4	Itching	20	2	0.8	1.2	0.834	0.186	6.439	<0.001	60.80

The t- table value at 5% is 2.045, 1% is 2.756 and 0.1% is 3.66.

**Abbreviations:** N (Number of Patients), BT (Before Treatment), AT (After Treatment), MD (Mean Deviation), SD (Standard Deviation), SE (Standard Error), T (T value), P (P value). The study of subjective parameters in Group 'A' *Dorali, Bel, Anantmul Siddha Tail picchu- dharan*, above 4 symptoms are presented as above.

From the table, it is revealed that there is reduction in symptoms of after treatment. The decline is observed in all parameters is statistically highly significant at 1% level. Regarding the pain (in anus) above data shows that the initial mean is 2.5 and after 15 days treatment of *Dorali, Bel, Anantmul tail picchudharan* (local application), it reduced to 1.2. The decline

in pain is statistically significant at 1% level in i.e. ( $t \pm 10.77$ ,  $p < 0.001$ ).

From above data it shows that in bleeding, spasm, itching, there is decline in all symptoms after 15 days of treatment the result of all parameter is statistically significant at 1% level i.e. for bleeding ( $t \pm 8.208$ ,  $p < 0.001$ ), Spasm ( $t \pm 9.542$ ,  $p < 0.001$ ) and itching ( $t \pm 6.439$ ,  $p < 0.001$ ).

Sr. No.	Symptoms	N	BT	AT	MD	SD	SE	T-value	P-value	%
1	Pain	30	2.37	1.03	1.333	0.758	0.138	9.633	<0.001	57.8
2	Bleeding	27	1.78	0.74	1.037	0.587	0.113	9.178	<0.001	61.7
3	Spasm	30	2.1	1.07	1.033	0.556	0.102	10.18	<0.001	51.7
4	Itching	22	2.18	1.14	1.136	0.722	0.154	6.789	<0.001	43.2

The t- table value at 5% is 2.045, 1% is 2.756 and 0.1% is 3.66.

The above data in table represents the main symptoms of Group B patient treated with the local application of Annovate Ointment for a period of 15 days. After applying paired “t” test before treatment (BT) & after treatment (AT) data about 4 parameters of Group B. It is revealed that Group B observation recorded significant decline in the value of all parameters after treatment i.e. in pain, bleeding, Spasm and Itching which is at 1% level.

Result in pain i.e. ( $t \pm 9.633$ ,  $p < 0.001$ ), Bleeding ( $t \pm 9.178$ ,  $p < 0.001$ ), Spasm ( $t \pm$

Hence from above observation, study shows that local application i.e. Picchudharan of Dorali, Bel, Anantmul Siddha Tail is also effective in reducing the symptoms and thus promotes the process of healing in anal fissure.

Following table showing the pattern of clinical recovery in 30 patients of Parikartika (Fissure) treated with Anovate Ointment in Group B

10.18,  $p < 0.001$ ), Itching ( $t \pm 6.789$ ,  $p < 0.001$ ).

The study reveals that local application Annovate Ointment is also significant for reducing the above symptoms and healing the fissure.

**Clinical Improvement- A comparative aspect:** After statistical analysis of individual group with paired ‘t’ test, for comparing Experimental group (Group A) with control group (Group B) unpaired ‘t’ test is applied. Following result are obtained after application of unpaired ‘t’ test. **Table:** Results after application of unpaired ‘t’ test

Parameter	GR A % of result	GR B % of result	Difference of mean	‘t’ value	P-value
Pain	52.78 %	57.78 %	0.07	0.377	0.708
Bleeding	53.85 %	61.70 %	0.194	1.037	0.305
Spasm	58.33 %	51.70 %	0.467	2.494	0.016
Itching	60.8 %	43.18 %	0.155	2.644	0.023

From the above data it shows that difference of mean reduction of both groups is insignificant. As the ‘p’ value is greater than 0.05 it reveals that mean

reduction of these 2 groups is almost same & there is no statistically notable significant different between results of both groups except as in spasm & itching.

Hence ‘H<sub>0</sub>’ Hypothesis is accepted that results obtained in both groups are similar in pain, bleeding, except in spasm & itching. In spasm as the ‘p’ value is greater than 0.05 it reveals that there is statistically significant difference in result obtained. *Dorali, Bel, Anantmul Sidha tail picbudharan* is more effective in relieving spasm & itching as compared to local application of Annovate oint.

### DISCUSSION & CONCLUSION

1. *Dorali, Bel, Anantmul Siddha Tail picchu dharan* (in anus) promotes the healing process in *Parikartika*. Spasm & itching reduces quickly as compare to Annovate Ointment. But pain & bleeding reduced quickly by local application of Annovate ointment.
2. The symptoms pain, bleeding are also relieved by *the Dorali, Bel, Anantmul Siddha Tail picbudharan*, but onset of action of Annovate ointment is more earlier.
3. There is no any complication or side effect seen with the application of *Dorali, Bel, Anantmul Siddha Tail picchu dharan* in *Parikartika*.

The above clinical trials indicates that *Dorali, Bel, Anantmul siddha tail picbudharana* has shown encouraging result in the management of *Parikartika* especially in acute stage.

This is pilot study, by taking large number of patient & applying suitable statistical tests, we can confirm the above result.

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