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 sidha tail mentioned by Acharya Kashyapa in Khilsthan 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 (¹). Acharya Charak has also motioned Parikartika under heading “Vaman Virechan Vyapad” (²). Acharya Vagbhat has stated Parikartika in “Arishta Lakshan” (Unauspicious prognostic features). The major reference stated by Acharya Kashyapa is found in ‘Garbhini chikitsa’ (³) (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 (⁴) (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 (5). 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.
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
      Sanskrut- 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 (6). 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 (7).
      Properties & action –
      Rasa: Katu, Tikta
**Guna:** Tiktna, Ruksa, Laghu  
**Virya:** Usna  
**Valpak:** Katu  
**Karma:** Dipaniya, Kaphavatshyamak, Vedanashyamak, Kandughna, Krumighna, Shwas-Kashar, Kushtaghna, Jwarighna

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

**Synonyms:**  
Sanskrit: Sriphala  
Eng.: Bengal Quince, Bael  
Hindi: Bela, Sruphal, Bel

** Constituents – Coumarins and Sterols**

**Properties & action –**  
**Rasa:** Kasaya, Tikta, Madhura  
**Guna:** Tiktna, Ruksa, Laghu  
**Virya:** Usna  
**Vipaka:** Katu  
**Karma:** Dipaniya, Vatahara, Pittashamak, Vatashyamak, Dahashyamak, Kaphahara, Samgrahi, Pittakara, Visaghna

1) **Anantmul (Sariva):** Sariva is a well-known drug of Ayurvedic Matera Medica has been in wide use since ancient times. In Ayurvedic texts, two varieties of Sariva 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 hima (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.

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

**Properties & action –**  
**Rasa:** Tikta, Madhura  
**Guna:** Guru, Snidha  
**Virya:** Shit  
**Vipaka:** Madhur  
**Karma:** Dipaniya, Vatahara, Pittashamak, Vatashyamak, Dahashyamak, Shothahar.

**SOP’s for Preparation of Dorali, Bel, Anantmul sidha 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 sidhha 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

<table>
<thead>
<tr>
<th>1) <strong>Guda Ruja/ Vedana/ Pain in Ano</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Grade</strong></td>
<td><strong>Symptom</strong></td>
</tr>
<tr>
<td>0</td>
<td>No pain</td>
</tr>
<tr>
<td>1</td>
<td>Pain is relieved within 1 hour after Defecation.</td>
</tr>
<tr>
<td>2</td>
<td>Pain is relieved with 4-5 hours after defecation.</td>
</tr>
<tr>
<td>3</td>
<td>Pain is present for whole day.</td>
</tr>
</tbody>
</table>
SECTION 2)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No bleeding</td>
</tr>
<tr>
<td>1</td>
<td>Bleeding along with defecation as</td>
</tr>
<tr>
<td></td>
<td>steak on stool</td>
</tr>
<tr>
<td>2</td>
<td>Drop-wise bleeding during &amp; after</td>
</tr>
<tr>
<td></td>
<td>defecation 0-10 drop occasionally</td>
</tr>
<tr>
<td>3</td>
<td>Drop-wise bleeding after</td>
</tr>
<tr>
<td></td>
<td>defecation 10-20 drops at every</td>
</tr>
<tr>
<td></td>
<td>defecation</td>
</tr>
</tbody>
</table>

3) Sphincter Spasm

<table>
<thead>
<tr>
<th>Grade</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Normal tone.</td>
</tr>
<tr>
<td>1</td>
<td>Index finger inserted with little</td>
</tr>
<tr>
<td></td>
<td>pain.</td>
</tr>
<tr>
<td>2</td>
<td>Index finger inserted with</td>
</tr>
<tr>
<td></td>
<td>moderate pain.</td>
</tr>
<tr>
<td>3</td>
<td>Patients does not allow PR</td>
</tr>
<tr>
<td></td>
<td>examination.</td>
</tr>
</tbody>
</table>

4) Itching

<table>
<thead>
<tr>
<th>Grade</th>
<th>Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Absent.</td>
</tr>
<tr>
<td>1</td>
<td>Occasionally in a day.</td>
</tr>
</tbody>
</table>

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 ‘t’ test as number of patients were 30. For comparing results in two groups this test was done.

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

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

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. ($t = 10.77, p < 0.001$).

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 ($t = 8.208, p < 0.001$), Spasm ($t = 9.542, p < 0.001$) and itching ($t = 6.439, < 0.001$).

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

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

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. ($t = 9.633, p < 0.001$), Bleeding ($t = 9.178, p < 0.001$), Spasm ($t = 10.18, p < 0.001$), Itching ($t = 6.789, p < 0.001$).

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

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

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 ‘H₀’ 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 Siddha tail picchudharan is more effective in relieving spasm & itching as compared to local application of Annovate oint.

DISCUSSION & CONCLUSION
1. Dorali, Bel, Anantmul Siddha Tail pichu dharan (in anus) promotes the healing process in Parikartika. Spasm & itching reduces quickly as compared 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 picchudharan, 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 picchudharana, but onset of action of Annovate ointment is more earlier.

The above clinical trials indicates that Dorali, Bel, Anantmul siddha tail picchudharana 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.

REFERENCES
11. Sanyal and Ghosh etal’s, 1934; Roberts, 1931.
12. Quality-Standard of Indian medicinal plants, vol-8 Medicinal plants unit published by Indian council of medical research, New Delhi 2010
13. *(Dutta, Ghosh and Chopra, 1938; Simpson and Williams, 19339; Rao,
1938 Murti and Seshadri, 1942; Chatterjee and Bhattacharya, 1955).


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Source of support: Nil
Conflict of interest: None Declared