THE EFFICACY OF DOORVADI GHRT IN THE MANAGEMENT OF PARIKARTIKA (FISSURE IN ANO)

1Barkade Pallavi S
2Kalmegh Manjusha S
1MS, Shalyatantra Dept. Vidarbha Ayurveda Mahavidyalaya, Chatri Talav Road, Dhanvantari Nagar, Amravati-444606
2Guide & Associate Professor, H.O.D. of Shalyatantra Dept. Vidarbha Ayurveda Mahavidyalaya, Chatri Talav Road, Dhanvantari Nagar, Amravati-444606

ABSTRACT:
Fissure in Ano (Parikartika) is a vertical tear or an elongated longitudinal ulcer in the long axis of stratified squamous epithelium of the lower anal canal. Ancient text couldn’t give a brief idea about this condition. Mainly it has been described as complication of Bastikarma and Atisar. It is so named in which sharp cutting pain is felt in the anus. For that conservative treatment fails, and modern surgical treatment of choice is again has limitations such as faecal incontinence. Hence, Doorvadi Ghrita having effective Vranaroapan & Dahaprashaman, Shonit sthapan property i.e. it relieves burning sensation quickly. So we modified a method of Local Application is conceived for this study.

Key words: Fissure in Ano, Doorvadi Ghrit, parikartika.

INTRODUCTION: Ayurveda is traditional medical system used by the majority of India’s population. Fissure in Ano is very common and most painful anorectal disorder in day today practice. Acute Fissure in Ano is characterized by spasm, pain on defaecation and passage of bright streaks of blood along with stool and if this fails to heal it gradually develops into chronic fissure in Ano. Ayurvedic literature, this condition is described as Parikartika. Mainly it has been described as complication of Bastikarma and Atisara. When conservative treatment fails Lord’s Anal Dilatation & Lateral sphincterotomy are treatment of choice which is again has limitations such as faecal incontinence & prolonged healing. Hence, in this study Doorvadi Ghrit selected for study which is having effective Vranaroapan & Dahaprashaman, Shonit sthapan property i.e. it relieves burning sensation quickly. So we modified a method of Local application which is found to be effective and increase the quality of life in patients suffering with fissure.

AIM: To study the efficacy of Doorvadi Ghrit in the management of Parikartika (Fissure in Ano).

OBJECTIVES:
1. To observe the effect of Doorvadi Ghrit in the management of Parikartika (Fissure in Ano)
2. To re-establish effective, alternative & easily available conservative management of fissure in Ano.
3. To study the various surgical & parasurgical treatment of fissure in Ano both in Ayurvedic & Modern science which are in practice.

METHODS & MATERIALS: The patients having classical signs & symptoms of fissure were examined & selected for the present study.

Method: Clinical study is as follows-
- Study Design: Randomized control Trial
- Source of Data: Patients were selected from Shalyatantra 0PD/IPD of
Vidarbha Ayurved Rugnalaya, Amravati.

- **Selection of Patient:**
  A) Inclusive Criteria:
  1) Patients aged between 20-60 years
  2) Patients of both Acute & Chronic fissures.
  3) Patients of either sex taken, female patients with pregnancy also included.

  B) Exclusive Criteria:
  1) Patients who have systemic diseases like Tuberculosis, Diabetes Mellits.
  2) Patients of Parikartika with no other associated anorectal diseases like Fistula, Haemorrhoids, Perianal Abscess.
  3) Patients of HIV, HBsAg, are excluded.

- **Inform Consent:** The patients were explained about the purpose, procedures and possible danger of the study and it was taken.

- **Sample Size:** Total 60 patients were taken in the study, Each group having 30 patients subjected to external application of ghril on fissure.

**Group A** : 30 Patients , subjected to *Shatdhaut Ghrit* application

**Group B** : 30 Patients, subjected to *Doorvadi Ghrit* application

- **Criteria for Assessments**

  **A) SUBJECTIVE CRITERIA**
  1. **PAIN:**
     1: Mild - Without Analgesic pain can be bearable
     2: Moderate - Respond to analgesics
     3: Severe – Does not respond to Analgesics
  
  2. **P/R BLEEDING:**
     0: No bleeding
     1: Mild – Intermittent, very slight streak on fecal matter.
     2: Moderate - Streak with intermittent drops.
     3: Severe – Drops with streak during & after defecation associated with anxiety, weakness, uneasiness & anemia.

  3. **BURNING SENSATION:**
     0: No burning sensation
     1: Mild – Slight burning after defecation last upto 1 hr
     2: Moderate – Burning after defecation last upto 6 hrs.
     3: Severe – Burning with discomfort after defecation lasts Upto 12 hrs.

  4. **TENDERNESS:**
     1: Mild - Pain on deep stretching
     2: Moderate – Pain on superficial stretching
     3: Severe – Patient doesn’t allow to touch

  5. **ITCHING:**
     0: No Itching
     1: Mild – Very slight, intermittent without excoriation.
     2: Moderate – Intermittent without excoriation .
     3: Severe – Continuous with perianal excoriation.

  **B) OBJECTIVE CRITERIA:**

  1. **SIZE OF ULCER:**
     0: No ulcer
     1: Small (1mm – 4mm)
     2: Medium (5mm- 8mm)
     3: Large (9mm-12mm)

  2. **SPHINCTOR TONE:**
     0: Normal
     1: Spasmodic

- **Materials:** Preparation of *Doorvadi Ghrit* was prepared according to standard Snehakalpana as told in Sharangdhar Samhita.

  1. **Doorvadi Ghrit (2)**
     - *Doorva swaras*
     - *Kampillak*
     - *Daruharidra Kalkam*
     - *Goghrit*

  2. **Shatdhaut Ghrit (3)**
• Goghrit
  3. Panchasakar Churna 3-6 gms at bed time with luke warm water.
  4. Jatyadi Tail basti before defaecation.

**Route of Administration:** It is applied locally in the form of pichu dipped in ghrit twice in a day.

**Duration of Treatment:** 1 month or upto complete relief of the symptoms (whichever is less)

**Statistical Analysis:** The obtained data were analyzed with the help of statistical tests.

**NAME OF TESTS APPLIED-**

• For ‘Within group analysis’: pain, burning sensation and itching, Paired ‘t’ test was applied.

• For ‘in between group analysis’ (comparison between pain, burning sensation, itching and size of ulcer, spasm of sphincter tone between two groups):- Unpaired ‘t’ test

**OBSERVATION & RESULTS: Effect of therapy on clinical parameters:** It has been explained in the criteria of assessment that the effect of therapy will be evaluated on clinical features by adopting GRADE system. These symptoms were pain, Pr Bleeding, itching. Each of these symptoms was assessed before the start of treatment and after the treatment. Relief in the symptoms was assessed on follow up.

**Within group analysis:** For within group analysis, Paired ‘t’ test was applied.

**Indications:**

NS - p > 0.05 - Not significant
* - p < 0.05 - Significant
** - p < 0.01 - More significant
*** - p < 0.001 - Highly significant

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**Table No.1 showing**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Gp</th>
<th>B.T.</th>
<th>A.T.</th>
<th>XD (%)</th>
<th>S.D.</th>
<th>S.E.</th>
<th>“P”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain</td>
<td>A</td>
<td>2.8</td>
<td>2</td>
<td>28.57</td>
<td>0.6644</td>
<td>0.1213</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>PR bleeding</td>
<td>B</td>
<td>2.733</td>
<td>0.7</td>
<td>74.38</td>
<td>0.9994</td>
<td>0.1825</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Burning Sensation</td>
<td>A</td>
<td>1.633</td>
<td>0.8667</td>
<td>46.92</td>
<td>0.7279</td>
<td>0.1329</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Tenderness</td>
<td>B</td>
<td>1.333</td>
<td>0.3</td>
<td>77.49</td>
<td>0.6149</td>
<td>0.1123</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Itching</td>
<td>A</td>
<td>2.767</td>
<td>1.867</td>
<td>32.52</td>
<td>0.712</td>
<td>0.13</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>B</td>
<td>2.2</td>
<td>0.6</td>
<td>72.72</td>
<td>0.724</td>
<td>0.1322</td>
<td>&lt;0.001</td>
<td></td>
</tr>
<tr>
<td>Size of Ulcer</td>
<td>A</td>
<td>2.633</td>
<td>1.833</td>
<td>30.38</td>
<td>0.6644</td>
<td>0.1213</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td>Spasm of Sph. Tone</td>
<td>B</td>
<td>2.467</td>
<td>0.7</td>
<td>71.62</td>
<td>0.8976</td>
<td>0.1639</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.667</td>
<td>1.567</td>
<td>41.24</td>
<td>0.8449</td>
<td>0.1543</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2.367</td>
<td>0.533</td>
<td>77.48</td>
<td>0.7466</td>
<td>0.1363</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.433</td>
<td>1.667</td>
<td>31.48</td>
<td>0.7279</td>
<td>0.1329</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2.433</td>
<td>0.5</td>
<td>79.44</td>
<td>0.8277</td>
<td>0.1511</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>1.5</td>
<td>1</td>
<td>33.33</td>
<td>0.6823</td>
<td>0.1246</td>
<td>&lt;0.05</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>1.467</td>
<td>0.2333</td>
<td>84.09</td>
<td>0.5683</td>
<td>0.1038</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Table No.2 Showing comparison of healing of ulcer

<table>
<thead>
<tr>
<th>Healing of Ulcer</th>
<th>GP A</th>
<th>GP B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.7667</td>
<td>1.933</td>
</tr>
<tr>
<td>Median</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>SD</td>
<td>0.7279</td>
<td>0.8277</td>
</tr>
<tr>
<td>SE</td>
<td>0.1329</td>
<td>0.1511</td>
</tr>
<tr>
<td>Sum</td>
<td>23</td>
<td>58</td>
</tr>
<tr>
<td>P</td>
<td>***</td>
<td></td>
</tr>
</tbody>
</table>

Mean difference in healing of ulcer in control Group is mean ± SE, which is 0.7667 ± 0.1329. Mean difference in cutting rate in experimental Group is 1.933 ± 0.1511. This mean difference in healing rate is statistically highly significant between Control and experimental Group (p value < 0.001).

Table No.3 showing Result, Effect on therapy & distribution of patients according to result

<table>
<thead>
<tr>
<th>Group</th>
<th>Cured</th>
<th>Markedly improved</th>
<th>Improved</th>
<th>No response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2</td>
<td>6</td>
<td>18</td>
<td>4</td>
<td>30</td>
</tr>
<tr>
<td>B</td>
<td>8</td>
<td>13</td>
<td>6</td>
<td>3</td>
<td>30</td>
</tr>
</tbody>
</table>

DISCUSSION: Parikartika can be correlate with Fissure in ano, according to Kashyapa it is classsified in 3 types. Vatik, Paittik, Kaphaja. The incidence of Parikartika is found more in middle age male persons with Vat-Pitta Prakriti, mix diet, irregular bowel habit and service job with sitting work. Pittaja type of Parikartika is found more with 6o’clock position.

Mechanism of Action:
- According to texts, the properties of Ghrit are Madhura and Pittahara as well as the efficacy has been emphasized by Acharyas. It brings smoothness in anal canal due its sheet virya.
- It is superior in all snehas. It is mrudu, saumya Alpaabhishyandhi,so helps in mechanism of defeacation.
- Doorva has kashaya rasa, anurasamadhu. Due to that it has shonitsthapniya property and hence it helps in PR Bleeding.
- It is kaphpittashamak and shit virya, so facilitates in burning sensation while defeacation.i.e. gudadaha.
- We are using here, doorva swaras for doorradi ghrit so it helps in vrana healing process. i.e. it act as vranaropak.
- Daruharidra has tikta, kashaya ras and ushna virya. So it acts as shothhar and vednasthapana i.e. anti-inflammatory & analgesic.
- Kampillak is katu, laghu,ushna and tikshna in nature. It has Rechak and krumighna property which act as antimicrobial and laxative agent.
- Thus, this whole drug i.e. doorradi ghrit a drug which produces a soothing effect, Vata-Pittahara, Vedna Sthapan , Vrana Sodhana, Vrana Ropana and influences reduction of inflammation will be more suitable than drug which may act as the best healer of ulcer on other parts of the body.
• This method of treatment is found to be effective and increase the quality of life in patients suffering with fissure.

CONCLUSION:
• On observing the overall effect of therapy Doorvadi Ghrit was found to be more effective in relieving pain, burning sensation and itching.

Doorvadi Ghrit preparation method is easy and less time consuming.

• Vata-Pittahara, VednaSthapana, Vrana Sodhana,Vrana Ropana and influences reduction of inflammation will be more suitable than drug which may act as the best healer of ulcer on other parts of the body.

• Doorvadi Ghrit probably is able to counteract these two factors more efficiently than the other drugs. The relief of severe pain within 24 hours is something remarkable about this drug although the ulcer takes as many as three to four weeks for complete healing.

• It is this soothing effect of Doorvadi Ghrita in combination with other mentioned drugs which makes this combination an ideal drug group for the treatment of fissure –in-ano.

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Corresponding Author: Dr.Barkade Pallavi S. , P.G.Scholar(ShalyaSamanya), Shalyatantra Dept. Vidarbha Ayurveda Mahavidyalaya, Chatri Talav Road, Dhanvantari Nagar, Amravati-444606 Email:pallobarkade1@gmail.com.

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