KAMPILLAKADI GHIRITA IN GARBHASHAYA GREEVA GATA VRANA
(CERVICAL EROSION)

Dhiman Kamini1*, Parmar Meena2, Dhiman K. S.3
1Dept of SR and PT, IPGT and RA, Jamnagar, Gujarat, India
2Dept of PT and SR, RGG PG Ayurvedic College, Paparola, HP, India
3Dept of Shalakya, IPGT and RA, Jamnagar, Gujarat, India

ABSTRACT

Certain diseases may not be life threatening but troublesome and irritating to an individual in day to day routine activity. “Cervical erosion” is one among them increasing day by day and demanding greater concern over it. It is a benign condition but if left untreated may leads up to infertility and predisposes to cervical malignancy. Cauterization is the known treatment for cervical erosion but chances of recurrence of the disease are high. Keeping this fact in mind the present clinical study has been undertaken. The total effect of drug was evaluated on the basis of signs and symptoms after completion of therapy. The data obtained in clinical study before and after treatment was expressed in terms of Mean, Standard Deviation (+SD) and Standard Error (+SE). Group-I revealed better results than Group-II over total criteria of assessment.

Keywords: Cervical Erosion, Garbhashaya Greeva Gata Vrana, Yoni dhavana, Pichu dhara

INTRODUCTION

Woman is the centre point of a family, society, nation and the world so health of the nation depends upon the health of a woman and the real worship of women is nothing but to provide better health to them by eradication of every disease and make them healthy and happy. Female body is one of the most wonderful and complex creations of the nature and the physiology of reproductive system of a woman is different from her male partner to a greater extent as she has to intersperse many functions like achievement of conception, child birth etc. These physiological changes make her prone to pathological disorders. That’s why reproductive health is as important as other aspects of health. In India, women of the child bearing age (18- 44) constitute 19% of the total population.

Certain diseases may not be life threatening but troublesome and irritating to an individual in day to day routine activity. “Cervical erosion” is one among them increasing day by day and demanding greater concern over it. It is a benign condition but if left untreated may leads up to infertility and predisposes to cervical malignancy. That’s why it is important to pay attention toward this troublesome disease and to detect these lesions early enough and treat them adequately if cancer of the cervix is to be warded off. It is one of the common chronic diseases in westernized population and is emerging as a major health problem in the developing world. Cardinal Symptom of this disease is white discharge P/V which is very common in women and it is a challenge to the Modem practitioner. Other symptoms are backache, dyspareunia and contact bleeding. Cervical erosion is diagnosed by P/S examination. If it is asymptomatic and physiological then needs no treatment. But when it is symptomatic and infected then the treatment is needed.

Cauterization is the known treatment for cervical erosion. It is proved that the effect of cautereization is temporary one and the chances of recurrence of the disease are high. Apart from this, the therapy is having side effects like secondary hemorrhage, infertility, stenosis etc. So, present study is planned to evaluate the effect of herbal drugs with the surgical management of the disease.

Clinically Cervical Erosion is the development of a reddened area on the portio vaginalis around the external OS. Pathologically Cervical erosion is a condition where squamous epithelium of the ectocervix (portio vaginalis) is replaced by columnar epithelium of the endocervix, it’s an interplay between two epithelia. Cervical erosion, is a benign condition and as such is not an ulcer, it will never ulcerate unless it turns into malignancy.

Incidence

Bang et al in their study reported cervical erosion to be 45.70% presently 80-85% of women has been computed with cervical erosion. After going through the detailed description of vrana and the characteristic features of cervical erosion i.e. srava etc. it can be coined as Garbhashaya Greeva Gata Vrana. From pathological view point, Garbhashaya Greeva Gata Vrana resembles with pittaja and Kaphaja yoniyapad due to its signs and symptoms. But vrana is most acceptable since it is showing similar character. Twak Mamsagata vrana can be taken as cervical erosion by their adhishthana as yoni and symptom as srava.

The similarity between Vrana and Garbhashaya Greeva Gata Vrana are

- Causes of vrana i.e Nija and Agantuja
- Srava, vrana and associated symptoms.

Line of treatment

As per Ayurvedic view point, this disease is caused by vitiation of three doshas with a clear predominance of Pitta Kapha Dosha. So, the selection of drugs should be done according to the nature of the disease and Doshika predominance. Pichudharana is considered the best and the most specific procedure in all vranas especially in yonigata...
Aim

Prakshalana Karma is mentioned by all Aacharyas in the classics of Ayurveda in Vrana management as it is having Vranashodhaka and vranaropaka property. Prakshalana Karma is mentioned by all Aacharyas in the management of Vrana. Nimba patra Kwatha Yoni dhawana also have vranashodhaka, Vranaropaka and Pittakaphashamak properties. Keeping all these facts in mind the present work a clinical comparative study has been undertaken with following aims and objectives.

Aims and objectives

- To evaluate the clinical efficacy of Nimba patrakwatha yoni prakshalana and local application of Kampillakadi ghrita in the management of Garbhashaya Greeva Gata Vrana.
- To evaluate comparative efficacy of cauterization in the management of Garbhashaya Greeva Gata Vrana (cervical erosion).

MATERIALS AND METHODS

A total number of 48 patients were selected for this study from the Dept. of Stree roga and Prasuti tantra O.P.D. and I.P.D. of R.G.G.P.G. Ayurvedic Hospital Paprola. Case selection was random regardless of caste, occupation, religion and socio economic Status. A detailed proforma was prepared, incorporating all the signs and symptoms based on Ayurvedic and modern description before the inclusion of patients in trial group. All the points in the perspective dusti of Doshas, Dushya, Prakriti on Ayurvedic line were also included in the proforma. Written consent was taken on that proforma before inclusion of a patient in trial group. All the points in the perspective dusti of Doshas, Dushya, Prakriti on Ayurvedic line were also included in the proforma. Written consent was taken on that proforma before inclusion of a patient in trial group. Merits and demerits of research, duration of trial and route of administration were explained to the patients before taking consent. During follow up, regular records were further documented in the proforma. The history of patients subjected for present work was carefully recorded giving special emphasis on marital status, sexual, menstrual, obstetric and contraceptive history, history of discharge regarding its colour, character, odour, periodicity, severity of discharge and other associated symptoms. Family history and history of past illness were also recorded. Diagnosis was made according to the signs and symptoms mentioned in Ayurvedic as well as modern texts.

Criteria of Diagnosis

The patients were diagnosed on the basis of signs and symptoms of the disease and later confirmed on per speculum examination. A wet smear of vaginal discharge was prepared and microscopic examination was done to detect any evidence of infection with the help of normal saline and KOH preparation.

Inclusion criteria

Married females of reproductive age group i.e. 20-35 years were selected. Patients suffering from Yonigata Srava, Yoni Kandu, Katishoola, Udarshoola, Mutradaha, Maithunasahatva etc. as per clinical symptoms and cervical erosion which was diagnosed through P/S findings were considered.

Examination of cervical erosion as per the assessment criteria for which specially prepared scoring system was adopted.

Exclusion criteria

Patients not willing for trial, not fulfilling inclusion criteria, Patients having any anatomical anomaly, Abnormal discharge due to malignancy and suffering from acute cervicitis, PID, chronic illness and having pregnancy (diagnosed) were excluded.

Method of study

The present study was a clinical study. Most of the study was done in outdoor patients of dept. This study was carried out in 48 patients. The selected patients were randomly divided into two groups named as Group-I and Group-II

Trial Group-I

Total 24 patients were included in this group and were given:
Nimba patra Kwatha for Yoni dhavana followed by local application of Kampillakadi ghrita (Picchu dharanra) on Garbhashaya Greeva Gata Vrana (cervical erosion).

Trial Group-II

This group also includes 24 patients and cauterization was done in these patients.

Duration of trial

Group-I: The duration of trial was 15 days for one menstrual cycle. The patients were assessed weekly.
Group-II: Duration of trial was once (One sitting) for one menstrual cycle.

Follow Up: After completion of trial for consecutive 2 months at the interval of 20 days.

Apathya: Excessive sweet, spicy and oily food.

Criteria of Assessment

The patients treated in trial groups were assessed by presence or absence of signs and symptoms before and after treatment. Symptomatic relief obtained by the treatment given was assessed periodically after every 7 days of initial scoring till the completion of treatment. Results were noted on the basis of cured /markedly improved/unchanged and on the basis of clinical improvement.

Subjective criteria

Presence or absence of the symptoms of Garbhashaya Greeva Gata Vrana (cervical erosion) formed subjective criteria. For making the assessment rational and scientific, the symptoms were given grades, according to their severity and presence in the body. (Table 1)

Objective criteria

It was assessed by evaluating findings which were carried out at the time of inclusion and initiation of trial in the patient and on the completion of trial. To assess the effect of therapy cervical cytology was carried out before treatment and after treatment to observe the changes in cervical epithelium at squamo columnar junction. Assessment of therapy was also carried out by comparing values of routine Haematological, Urine and Stool investigations, before and after treatment. The gradation system adopted for this purpose (Improvement in the gynaecological examination findings) is as:-
Types of erosion

Assessment of size

According to % scale system each lip size was measured, according to spread of diseased area.

- Simple flat
- Papillary type
- Follicular type

Appearance: According to actual colour of erosion and associated with cervical tissue of portio, along with discharge on cervix. (Table 2)

- 0 - White colour / Normal tissue / No discharge.
- 1 - Pink/granulation tissue complete/ slight discharge.
- 2 - Red/No granulation/ Moderate Discharge
- 3 -Deep Red/ No granulation/Cx embedded in

Discharge

Criteria for the assessment of total effect of therapy

The total effect of drug was evaluated on the basis of signs and symptoms after completion of therapy. Total cases taken for study were 48, 24 in each group and for assessment they were categorized in Table 3. The data obtained in clinical study before and after treatment was expressed in terms of Mean, Standard Deviation (+SD) and Standard Error (+SE). Appropriate test like t-test was applied to observe the significance between before and after treatment and regarding inter group comparison of drug effects. The obtained results were interpreted as

- Insignificant result - P>0.05
- Significant - P<0.01
- Highly significant - P<0.001

In Group-II, no change was seen up to 7 days and patients were complaining of excessive white coloured discharge P/V. slight changes in slough area were seen after 15 days. Re-epithelization was totally completed within 6-8 weeks, though the patients were still complaining of white discharge P/V.

In Both groups (i.e. Kampillakadi Ghrita for local application in 1st group and electric cauterization in 2nd group) cervical cytology had shown different time of healing process. In local application with Kampillakadi Ghrita the re-epithelization process was completed within 4 weeks while electric cauterization group took 6-8 weeks for re- epithelization.

Table 1: Objective Criteria for Assessment

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Parameter (white discharge P/V)</th>
<th>Criteria</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yonigata Srava</td>
<td>Normal – (No c/o of discharge)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mild-Occasional discharge (slight wetting of Garments on and off)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate- Wetting of Garments present as stated by patient and on P/S examination white discharge +ve.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Severe- Excessive vaginal discharge as stated by patient and outpouring discharge during local examination.</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Yonikandu (I itching Vulva)  

Absence

Mild- (Occasional)

Moderate - Disturbs daily routine/ increase after specific time like menstruation micriturition etc./relief after medicine.

Severe- Affects routine activity/No relief after taking medicine

3. Katishula (Low backache)

No Pain

Mild - (Occasional) No interference with daily routine

Moderate – backache during any effort and forward bending (Interference with daily routine) and relief after taking medicine.

Severe-Excessive/interference with daily routine /No relief after taking medicine

4. Udarashula (Pain Lower abdomen)

No Pain

Mild – (Occasional) No interference with daily routine.

Moderate – continuous /Interference with daily routine/Relief after taking medicine.

Severe- No co-operation during P/A and P/V examination and H/o no relief after medicine.

5. Mutradaha (Burning micturition)

Absence

Mild (Occasional)

Moderate – Relief by cold water wash

Severe- Patients wants to avoid Micturition

6. Cervical tenderness

Absence

Only with compression

Rubbing with swabs

Severe (by touch)- patients resists during examination of cervix

Dhiman Kamini et al / IJRAP 3(2), Mar – Apr 2012

Table 2: Objective Criteria for Assessment

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Parameter</th>
<th>Criteria</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Yonigata Srava (white discharge P/V)</td>
<td>Normal – (No c/o of discharge)</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mild-Occasional discharge (slight wetting of Garments on and off)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Moderate- Wetting of Garments present as stated by patient and on P/S examination white discharge +ve.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Severe- Excessive vaginal discharge as stated by patient and outpouring discharge during local examination.</td>
<td>3</td>
</tr>
</tbody>
</table>

2. Yonikandu (I itching Vulva)  

Absence

Mild- (Occasional)

Moderate - Disturbs daily routine/ increase after specific time like menstruation micriturition etc./relief after medicine.

Severe- Affects routine activity/No relief after taking medicine

3. Katishula (Low backache)

No Pain

Mild - (Occasional) No interference with daily routine

Moderate – backache during any effort and forward bending (Interference with daily routine) and relief after taking medicine.

Severe-Excessive/interference with daily routine /No relief after taking medicine

4. Udarashula (Pain Lower abdomen)

No Pain

Mild – (Occasional) No interference with daily routine.

Moderate – continuous /Interference with daily routine/Relief after taking medicine.

Severe- No co-operation during P/A and P/V examination and H/o no relief after medicine.

5. Mutradaha (Burning micturition)

Absence

Mild (Occasional)

Moderate – Relief by cold water wash

Severe- Patients wants to avoid Micturition

6. Cervical tenderness

Absence

Only with compression

Rubbing with swabs

Severe (by touch)- patients resists during examination of cervix

Dhiman Kamini et al / IJRAP 3(2), Mar – Apr 2012
Table 2: Objective Criteria for Assessment

<table>
<thead>
<tr>
<th>Grade-I</th>
<th>Grade-II</th>
<th>Grade-III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superficial involvement of mucous membrane</td>
<td>Deep involvement of eroded area</td>
<td>Very deep involvement of eroded area</td>
</tr>
<tr>
<td>Pink to red colour</td>
<td>Red Colour</td>
<td>Deep red</td>
</tr>
<tr>
<td>Slight tenderness/No tenderness</td>
<td>Cervical tenderness ++ (Moderate)</td>
<td>Cervical tenderness +++ (Severe)</td>
</tr>
<tr>
<td>No or Mild discharge</td>
<td>Discharge (Moderate)</td>
<td>Excessive Discharge</td>
</tr>
</tbody>
</table>

Table 3: Criteria for Assessment of Total Effect of Therapy

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Parameters</th>
<th>% relief</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Cured</td>
<td>More than 75% relief in the signs and symptoms</td>
</tr>
<tr>
<td>2.</td>
<td>Markedly Improved</td>
<td>51-75% relief in the signs and symptoms</td>
</tr>
<tr>
<td>3.</td>
<td>Mildly Improved</td>
<td>25-50% relief in the signs and symptoms</td>
</tr>
<tr>
<td>4.</td>
<td>Unchanged</td>
<td>Less than 25% change in the signs and symptoms</td>
</tr>
</tbody>
</table>

Table 4: Effect of therapy on cardinal and Associated Symptoms of Cervical Erosion (Garbhashaya Greeva Gata Vrana)

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Mean score BT</th>
<th>Mean diff.</th>
<th>% relief</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yonigata srava</td>
<td>2.290</td>
<td>0.41</td>
<td>1.87</td>
<td>93.45</td>
<td>0.559</td>
<td>0.111</td>
<td>16.38</td>
</tr>
<tr>
<td>Yoni Kandu</td>
<td>1.21</td>
<td>0.071</td>
<td>1.13</td>
<td>94.13</td>
<td>0.25</td>
<td>0.68</td>
<td>15.55</td>
</tr>
<tr>
<td>Katishula</td>
<td>1.26</td>
<td>0.466</td>
<td>0.80</td>
<td>64.02</td>
<td>0.4</td>
<td>0.105</td>
<td>7.61</td>
</tr>
<tr>
<td>Udarshula</td>
<td>1.28</td>
<td>0.428</td>
<td>0.85</td>
<td>66.65</td>
<td>0.12</td>
<td>0.046</td>
<td>18.63</td>
</tr>
<tr>
<td>Mutradaha</td>
<td>1</td>
<td>0.33</td>
<td>0.67</td>
<td>67</td>
<td>0.47</td>
<td>0.220</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Table 5: Effect of therapy on Signs of Cervical Erosion (Garbhashaya Greeva Gata Vrana)

<table>
<thead>
<tr>
<th>Signs</th>
<th>Mean score BT</th>
<th>Mean diff.</th>
<th>% relief</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>2.5</td>
<td>0.45</td>
<td>2.042</td>
<td>81.68</td>
<td>0.35</td>
<td>0.071</td>
<td>28.74</td>
</tr>
<tr>
<td>Degree</td>
<td>1.91</td>
<td>0.37</td>
<td>1.54</td>
<td>80.42</td>
<td>0.577</td>
<td>0.117</td>
<td>12.72</td>
</tr>
<tr>
<td>Cervical Tenderness</td>
<td>1</td>
<td>0.142</td>
<td>0.85</td>
<td>85.8</td>
<td>0.349</td>
<td>0.132</td>
<td>6.49</td>
</tr>
</tbody>
</table>

Table 6: Effect of therapy on Cervical Cytology

<table>
<thead>
<tr>
<th>Squ Epithelial Cells with endocervical cells</th>
<th>Mean score BT</th>
<th>Mean diff.</th>
<th>% relief</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.291</td>
<td>0.709</td>
<td>70.09</td>
<td>454.2</td>
<td>0.92</td>
<td>7.695</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Table 7: Effect of therapy on Cardinal and Associated Symptoms of Cervical Erosion (Garbhashaya Greeva Gata Vrana) of Group-II

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>Mean score BT</th>
<th>Mean diff.</th>
<th>% relief</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yonigata srava</td>
<td>2.166</td>
<td>0.875</td>
<td>1.291</td>
<td>58.83</td>
<td>0.59</td>
<td>0.158</td>
<td>4.51</td>
</tr>
<tr>
<td>Yoni Kandu</td>
<td>1.41</td>
<td>0.5833</td>
<td>0.833</td>
<td>59.10</td>
<td>0.3708</td>
<td>0.107</td>
<td>7.7</td>
</tr>
<tr>
<td>Katishula</td>
<td>1.214</td>
<td>0.5</td>
<td>0.714</td>
<td>58.83</td>
<td>0.591</td>
<td>0.1581</td>
<td>4.516</td>
</tr>
<tr>
<td>Udarshula</td>
<td>1.333</td>
<td>0.5</td>
<td>0.83</td>
<td>62.49</td>
<td>0.372</td>
<td>0.152</td>
<td>5.46</td>
</tr>
<tr>
<td>Mutradaha</td>
<td>1.2</td>
<td>0.4</td>
<td>0.8</td>
<td>66.66</td>
<td>0.4</td>
<td>0.179</td>
<td>4.46</td>
</tr>
</tbody>
</table>

Table 8: Effect of therapy on Signs of Cervical Erosion (Garbhashaya Greeva Gata Vrana) Group II

<table>
<thead>
<tr>
<th>Signs</th>
<th>Mean score BT</th>
<th>Mean diff.</th>
<th>% relief</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>2</td>
<td>0.38</td>
<td>1.41</td>
<td>70.83</td>
<td>0.493</td>
<td>0.100</td>
<td>13.98</td>
</tr>
<tr>
<td>Degree</td>
<td>1.91</td>
<td>0.5833</td>
<td>1.32</td>
<td>69.46</td>
<td>0.471</td>
<td>0.0963</td>
<td>13.81</td>
</tr>
<tr>
<td>Size</td>
<td>1.91</td>
<td>0.41</td>
<td>1.5</td>
<td>78.54</td>
<td>0.705</td>
<td>0.174</td>
<td>10.67</td>
</tr>
<tr>
<td>Cervical Tenderness</td>
<td>1.66</td>
<td>0.66</td>
<td>1</td>
<td>60.24</td>
<td>0.3716</td>
<td>0.1522</td>
<td>5.53</td>
</tr>
</tbody>
</table>

Table 9: Effect of therapy on Cervical Cytology Group II

<table>
<thead>
<tr>
<th>Squ Epithelial Cells with endocervical cells</th>
<th>Mean score BT</th>
<th>Mean diff.</th>
<th>% relief</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.416</td>
<td>0.584</td>
<td>58.4</td>
<td>0.492</td>
<td>0.100</td>
<td>5.78</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

Inflammatory cells | 0.562 | 0.25 | 0.312 | 55.55 | 0.463 | 0.115 | 2.69 | <0.05 |

206
DISCUSSION
Probable action of Shodhana Karma and Pichu dhara is based on Curative and Preventive aspect of disease i.e. Vrana Shodhana and Ropana for checking further progress of disease. It acts on Garbhshayana greeva shotha which is nothing but preliminary stage of Garbhshayana Greeva gata Vrana, reduces shotha and it do purification which is nothing but preliminary stage of Garbhshayana Shodhana and Ropana for checking further progress of disease at the door step that is Garbhshayana.

Kampillakadi Ghrita helps to minimize the tissue damage and provides adequate tissue perfusion and oxygenation. It helps to restore the disrupted anatomical continuity and function of the affected part by its Antimicrobial, Anti Inflammatory, Anti Oxidant and Wound healing properties. As the Cow ghee is concerned it is a rich source of essential fatty acids (like Omega-3 and Omega-6EFA’s) which regulates PG synthesis and is important for the promotion of quick healing and maintenance of normal anatomical integrity of affected part.

Table 10: Inter Group Comparison of Effect of Therapy Over Criteria of Assessment

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>% relief</th>
<th>Group I</th>
<th>Group II</th>
<th>Difference in %</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yoni greta srava</td>
<td>81.83</td>
<td>70.83</td>
<td>21.22</td>
<td>0.5667</td>
<td>0.163</td>
<td>0.5279</td>
<td>1.078</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Yoni kandu</td>
<td>94.13</td>
<td>89.07</td>
<td>5.06</td>
<td>0.1234</td>
<td>0.2847</td>
<td>0.5099</td>
<td>0.2010</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Kattu veerya</td>
<td>78.54</td>
<td>75.85</td>
<td>2.69</td>
<td>0.1483</td>
<td>0.2847</td>
<td>0.5099</td>
<td>0.2010</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Udarshila</td>
<td>66.65</td>
<td>62.49</td>
<td>4.16</td>
<td>0.1584</td>
<td>0.2847</td>
<td>0.5099</td>
<td>0.2010</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Mutradaha</td>
<td>67</td>
<td>66.66</td>
<td>0.34</td>
<td>0.2626</td>
<td>0.4950</td>
<td>0.2010</td>
<td>0.706</td>
<td>&gt;0.05</td>
</tr>
</tbody>
</table>

Table 11: Inter-Group Comparison over total criteria

<table>
<thead>
<tr>
<th>Results</th>
<th>Mean Score</th>
<th>% relief</th>
<th>Group I</th>
<th>Group II</th>
<th>BT- AT</th>
<th>SD±</th>
<th>SE±</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>1.596</td>
<td>0.311</td>
<td>1.285</td>
<td>0.4549</td>
<td>1.516</td>
<td>0.2847</td>
<td>0.5099</td>
<td>0.2010</td>
<td>&gt;0.05</td>
</tr>
<tr>
<td>Group II</td>
<td>1.645</td>
<td>0.5661</td>
<td>1.078</td>
<td>0.284</td>
<td>0.094</td>
<td>0.5099</td>
<td>0.2010</td>
<td>&gt;0.05</td>
<td></td>
</tr>
</tbody>
</table>

Table 12: Overall effect of therapy in two groups (48 patients)

<table>
<thead>
<tr>
<th>Results</th>
<th>No. of Patients</th>
<th>% of Patients</th>
<th>Total No. of Patients</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured</td>
<td>20</td>
<td>83.33</td>
<td>17</td>
<td>70.83</td>
</tr>
<tr>
<td>Markedly improved</td>
<td>2</td>
<td>8.33</td>
<td>2</td>
<td>8.33</td>
</tr>
<tr>
<td>Moderately improved</td>
<td>1</td>
<td>4.16</td>
<td>2</td>
<td>8.33</td>
</tr>
<tr>
<td>Unchanged</td>
<td>1</td>
<td>4.16</td>
<td>3</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Table 13: Re - epithelisation of Cervix (Group-I)

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Days</th>
<th>Appearance of Cervix</th>
<th>Discharge P/V</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3rd</td>
<td>Red in colour</td>
<td>++ (Moderate)</td>
</tr>
<tr>
<td>2</td>
<td>5th</td>
<td>Pink</td>
<td>+ (very mild discharge)</td>
</tr>
<tr>
<td>3</td>
<td>7th</td>
<td>Whitish pink in colour</td>
<td>No white discharge</td>
</tr>
</tbody>
</table>

Wound Healing
(Aamlaki, Haridra, Kampillaka, Nimba, Mustak, Bala, Lodhara, Patol, Vidanga, Dhatki, Khadira)
(Increase in granulation tissue)

Anti Microbial
(Kampillaka, Vidanga, Dhataki, Nimba, Khadira, Mustaka, Haritaki, Bibhitak)
(Bacteriostatic-cidal & antifungal)

Anti Inflammatory
(Kampillaka, Nimba, Sarjarasa, Agaru, Mustak, Bala, Lodhara, Haritaki, Bibhitak, Haridra)
(Inhibits NO, IL-6, COX-2, IL-1, gene expression)

Antioxidant
(Aamlaki, Bala, Patol, Vidanga, Haridra, Nimba, Kampillaka)
(Act against free radicals)
Principles of Electric Cauterization:
The cautery focuses on:
1. Removal of eroded part of cervix by heat.
2. Destroys deep seated infection.
3. Cystic glands get punctured by using the electric cautery and after that healing starts gradually and smoothly.

Effect of therapy was studied on 48 patients by random distribution of patients in Group-I and Group-II i.e. 24 patients in each group.

Group-I: In this group 24 patients were treated with Nimba Patra Kwatha Yonidhawana followed by Kampillakadi Ghrita.

**Effect of Therapy on Chief Complaints**
At the end of the treatment course of patients had shown, 93.45% relief in yonigata srava, 94.13% in yonikandu, 64.02% in katishula, 66.65% in udarashula and 67% relief in mutradaha which were statistically highly significant.

**Effect of therapy on local signs**
Effect of therapy had shown 80.42% relief in degree of cervical erosion, 81.68% relief in appearance of cervical erosion and 93.45% reduction in size of cervical erosion which were statistically highly significant (P<0.001).

**Effect of therapy on cervical cytology**
In cervical cytology, the superficial squamous cells were increased after the treatment. Whereas the inflammatory cells were reduced to 68.8% which suggest that the squamous epithelial cells were being regenerated 70.9% under the influence of this drug. It indicates that the columnar epithelial cells were replaced by squamous epithelial which has positive effect on cervical cells which was statistically highly significant.

Group-II: In this group, 24 patients were treated with electric cauterization. At the end of the treatment the effect of therapy on chief complaints has shown 58.83% relief in yonigata srava, 59.10% in yonikandu, 58.83% in katishula 62.49% in udarashula and 66.66% in mutradaha which were statistically significant.

**Effect of therapy on local sign**
Effect of therapy had shown statistically highly significant result with 69.46% relief in degree, 70.83% in appearance and 78.54% reduction in size of G.G.V.

**Effect on Cervical cytology**
Cervical cytology revealed that the superficial squamous cells replaced the columnar epithelial cells by 58.4% after the treatment. Where as the inflammatory cells were reduced to 68.8% which suggest that the squamous epithelial cells by 58.4% after the treatment. So, Kampillakadi Ghrita can be considered as a better alternative to electric cauteryization. On the basis of the results of this research work it can be said that the Kampillakadi Ghrita is much more effective in the management of Garbhashaya Greeva Gata Vrana (cervical erosion) in several aspects as compared to electric cauteryization but to establish this fact, further study of longer duration and on larger sample is required.

**CONCLUSION**
In treated group with Kampillakadi Ghrita, there was marked reduction of symptoms and signs like Yonigata Srava, Yoni kandu, Size and appearance of cervical erosion. Replacement of columnar epithelium by squamous epithelium was faster in trial group of Kampillakadi Ghrita than electric cauteryization. No recurrence of cases were reported during the follow up in treated group with Kampillakadi Ghrita. No unto wanted effect of the therapy was observed during the treatment and during follow up period. So, Kampillakadi Ghrita can be considered as a better alternative to electric cauteryization. On the basis of the results of this research work it can be said that the Kampillakadi Ghrita is much more effective in the management of Garbhashaya Greeva Gata Vrana (cervical erosion) in several aspects as compared to electric cauteryization but to establish this fact, further study of longer duration and on larger sample is required.

**REFERENCES**

Source of support: Nil, Conflict of interest: None Declared