CLINICAL EVALUATION OF RALADI MALHAR AND VARADI GUGGULU IN THE MANAGEMENT OF DUSHTA VRANA

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ABSTRACT

Wound management is the backbone of surgical diseases specially when wound is infected it’s a real challenge to heal it, the amount of antibiotics used in modern science creates lot of side effects and in a poor country like India as to the financial burden to the patients. The result of my drugs are very effective in my study. The use of these herbal compounds in wound management will save a lot of complications pertaining to the antibiotics. This drug will also help the patients who due to certain condition like (renal failure) are not in a position to take antibiotics. This drug can really be a safe remedy for the management of wound and this can be helpful to the society and mankind. So the combination of herbal drugs (oral and topical) is more effective in the management of Dushta Vrana.

KEYWORDS: Dushta Vrana, Chronic Wound

INTRODUCTION

A healthy mind in a healthy body is the principle aim guiding all prevailing systems of medicine. Today it is defined as comprehensive state of well being which refers to physical, mental, spiritual and social well being of an individual (W.H.O.’s definition of health), which is very similar to definition of Swastha-healthy person given by Acharya Sushruta. Shalya Tantra is one of the important branch of Ayurveda in which surgical and parasurgical techniques has been described for the management of various diseases. Trauma is so universal that the declaration of Alma Ata included the care of the common injuries as an essential part of primary care. The present work is a further step in the field of ShalyaTantra entitled “Role of Raladi Malhar and Varadi Guggulu in the management of Dushta Vrana” has been taken with following aims and objectives.

To decide the etiological factors both local as well as systemic responsible for the non-healing of the wound. To assess the efficacy of Raladi Malhar and Varadi Guggulu in the management of Dushta Vrana.

Aims and Objectives: Study of Raladi Malhar used as topically Varadi Guggulu used as systematically, in the management of Dushta Vrana., To cure the disease in shorter time., To cause less discomfort., To provide economically better and cost effective therapy., To provide complication free therapy.

MATERIALS AND METHODS

Materials: All the ulcers were cleaned and dressed with Raladi Malhar in the present study, Varadi Guggulu (2tab) B.D. was advised daily with plane water.

Selection of the Patients

The patients having classical signs symptoms of Dushta Vrana were examined and selected for the present study,
the patient fulfilling the clinical criteria for diagnosis of Dushta Vrana were randomly selected irrespective for their age, sex, religion, occupation etc. from O.P.D. and I.P.D. section of department of shalya Tantra, Rishikul Govt. P.G. Ayurvedic college and Hospital, Haridwar, U.K.

**INCLUSION CRITERIA:** Patients of all age group both sexes suffering from Dushta Vrana.

**EXCLUSION CRITERIA:** Tubercular ulcer, Syphilitic ulcer, Trophic ulcer, Malignant ulcer, Arterial ulcer, Gouty ulcer, Diabetic ulcer, Softchancreorsore(Ducrey’s).

**Study Procedure, Dosing Schedule and Duration of Treatment**

Total 30 patients were registered for present research work.

<table>
<thead>
<tr>
<th>Aushadi Name</th>
<th>Mode of Administration</th>
<th>Preparation of Drug</th>
<th>Dose</th>
<th>Duration of Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raladi Malhar</td>
<td>Locally</td>
<td>Ointment</td>
<td>Once daily</td>
<td>28 days</td>
</tr>
<tr>
<td>Varadi Guggulu</td>
<td>Orally</td>
<td>Vati</td>
<td>1000 mg, B.D.</td>
<td>28 days</td>
</tr>
</tbody>
</table>

Clinical Evaluation of Raladi Malhar and Varadi Guggulu in Management of Dushta Vrana

**Composition of Raladi Malhar Malhar**- Rala- 5 Part, Khadir – 2 Part, Kankusth -1Part, Sarsapa Tail- 8Part.


**Criteria for Assessment**

The result of therapy was assessed both by ayurvedic and modern system on the basis of observation of clinical improvement in the Sign and Symptoms before, during and after treatment. Laboratory investigation were performed to rule out associated ailment or other systemic disorders.

**Overall Assessment**

The overall effect of the trial drug was assessed by the significant change in the Dushta Vrana before and after treatment. The results are presented into four categories as given below.

- Moderate improvement
- Mild improvement
- No improvement

**Statistical Analysis**

The data generated in clinical study was analysed by applying ‘t’ test. The obtained results were interpreted as –

Not Significant (NS): p>0.05, Significant (S): p<0.05 or p<0.01, Highly Significant (HS): p ≤ 0.001

**Observation and Results:** In the present clinical trial total 30 patients of Dushta Vrana were considered. All 30 patients completed the full course of treatment as proposed in the present research work. So the present data are analysed in 30 patients.
Effect of therapies

30 patients were selected in present study. The efficacy of the therapy was at adjudging on varied parameters and the results were derived after execution of statistical methodology. The effect of each therapy has been presented in pages that would follows.

Effect of Therapies on Symptomatological Score

The signs and symptoms of disease, complained by patients were compiled before and after treatment and were assessed on the basis of scoring given to them.

The statistical analysis of symptoms assessed weekly-

Effect on Pain

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.T.</td>
<td>A.T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 days</td>
<td>1.46</td>
<td>1.2</td>
<td>0.26</td>
<td>18%</td>
<td>0.69</td>
<td>2.11</td>
</tr>
<tr>
<td>14 days</td>
<td>1.46</td>
<td>1.06</td>
<td>0.40</td>
<td>29%</td>
<td>0.72</td>
<td>3.26</td>
</tr>
<tr>
<td>21 days</td>
<td>1.46</td>
<td>1.07</td>
<td>0.39</td>
<td>36.3%</td>
<td>0.73</td>
<td>3.74</td>
</tr>
<tr>
<td>28 days</td>
<td>1.46</td>
<td>0.93</td>
<td>0.53</td>
<td>50.90%</td>
<td>0.77</td>
<td>4.01</td>
</tr>
</tbody>
</table>

The initial mean score of pain was observed 1.46, which was brought down to 1.2 after 7 days, 1.06 after 14 days, 1.07 after 21 days, and 0.93 after 28 days of treatment with 50.90% relief. The test of significance shows that treatment was highly significant.

Effect on Tenderness

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Mean</th>
<th>SD</th>
<th>SE</th>
<th>t-value</th>
<th>p-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.T.</td>
<td>A.T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 days</td>
<td>1.93</td>
<td>1.73</td>
<td>0.20</td>
<td>10.34</td>
<td>0.48</td>
<td>2.26</td>
</tr>
<tr>
<td>14 days</td>
<td>1.93</td>
<td>1.56</td>
<td>0.37</td>
<td>18.96</td>
<td>0.55</td>
<td>3.61</td>
</tr>
<tr>
<td>21 days</td>
<td>1.93</td>
<td>1.43</td>
<td>0.50</td>
<td>25.86</td>
<td>0.68</td>
<td>4.02</td>
</tr>
<tr>
<td>28 days</td>
<td>1.93</td>
<td>1.06</td>
<td>0.87</td>
<td>40.65</td>
<td>0.93</td>
<td>5.47</td>
</tr>
</tbody>
</table>
The initial mean score of tenderness was observed 1.93 before treatment which was brought down to 1.73 after 7 days, 1.56 after 14 days, 1.43 after 21 days and 1.06 after 28 days of treatment of 40.65 % relief .This result was statistically highly significant .

Effect on Discharge

Table 4

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Mean B.T.</th>
<th>Mean A.T.</th>
<th>X</th>
<th>% Relief</th>
<th>SD</th>
<th>SE</th>
<th>t - value</th>
<th>p – value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 days</td>
<td>1.31</td>
<td>1.06</td>
<td>0.25</td>
<td>18.42</td>
<td>0.43</td>
<td>0.08</td>
<td>2.98</td>
<td>&lt;0.05</td>
<td>S</td>
</tr>
<tr>
<td>14 days</td>
<td>1.31</td>
<td>0.96</td>
<td>0.35</td>
<td>26.31</td>
<td>0.48</td>
<td>0.08</td>
<td>3.83</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>21 days</td>
<td>1.31</td>
<td>0.82</td>
<td>0.49</td>
<td>36.84</td>
<td>0.57</td>
<td>0.10</td>
<td>4.52</td>
<td>&lt;0.001</td>
<td>HS</td>
</tr>
<tr>
<td>28 days</td>
<td>1.31</td>
<td>0.62</td>
<td>0.69</td>
<td>60.6</td>
<td>0.54</td>
<td>0.10</td>
<td>6.85</td>
<td>&lt;0.001</td>
<td>HS</td>
</tr>
</tbody>
</table>

The mean score of discharge 1.31 before treatment which was brought down to 1.06 after 7 days , 0.96 after 14 days , 0.82 after 21 days and 0.62 after 28 days of treatment 52.63 % relief . This result was statistically highly significant.

Effect on Depth

Table 5

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Mean B.T.</th>
<th>Mean A.T.</th>
<th>X</th>
<th>% Relief</th>
<th>SD</th>
<th>SE</th>
<th>t – value</th>
<th>p – value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 days</td>
<td>1.03</td>
<td>1</td>
<td>0.03</td>
<td>6.67</td>
<td>0.25</td>
<td>0.04</td>
<td>1.44</td>
<td>&gt;0.05</td>
<td>NS</td>
</tr>
<tr>
<td>14 days</td>
<td>1.03</td>
<td>0.86</td>
<td>0.17</td>
<td>20.02</td>
<td>0.34</td>
<td>0.06</td>
<td>2.70</td>
<td>&lt;0.05</td>
<td>S</td>
</tr>
<tr>
<td>21 days</td>
<td>1.03</td>
<td>0.74</td>
<td>0.29</td>
<td>28.15</td>
<td>0.54</td>
<td>0.10</td>
<td>3.08</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>28 days</td>
<td>1.03</td>
<td>0.66</td>
<td>0.37</td>
<td>40.04</td>
<td>0.56</td>
<td>0.10</td>
<td>3.92</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
</tbody>
</table>
Clinical Evaluation of Raladi Malhar and Varadi Guggulu in the Management of Dushta Vrana

The mean score of depth 1.01 before treatment which was brought down to 1. After 7 days, 0.86 after 14 days, 0.76 after 21 days and 0.66 after 28 days of treatment 40.04% relief. This result was statistically significant.

Effect on Floor

Table 6

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Mean</th>
<th>X</th>
<th>% Relief</th>
<th>SD</th>
<th>SE</th>
<th>t – value</th>
<th>p – value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.T.</td>
<td>A.T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 days</td>
<td>2.93</td>
<td>2.67</td>
<td>0.26</td>
<td>9.09</td>
<td>0.44</td>
<td>2.53</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>14 days</td>
<td>2.93</td>
<td>2.36</td>
<td>0.57</td>
<td>20.31</td>
<td>0.50</td>
<td>3.18</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>21 days</td>
<td>2.93</td>
<td>2.1</td>
<td>0.83</td>
<td>32.40</td>
<td>0.69</td>
<td>6.91</td>
<td>&lt;0.001</td>
<td>HS</td>
</tr>
<tr>
<td>28 days</td>
<td>2.93</td>
<td>1.91</td>
<td>1.02</td>
<td>55.27</td>
<td>0.61</td>
<td>9.27</td>
<td>&lt;0.001</td>
<td>HS</td>
</tr>
</tbody>
</table>

The mean score of floor 2.93 before treatment which was brought down to 0.26 after 7 days, 2.36 after 14 days, 2.1 after 21 days and 1.91 after 28 days of treatment 55.27% relief. This result was statistically highly significant.

Effect on Size

Table 7

<table>
<thead>
<tr>
<th>No. of days</th>
<th>Mean</th>
<th>X</th>
<th>% Relief</th>
<th>SD</th>
<th>SE</th>
<th>t – value</th>
<th>p – value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B.T.</td>
<td>A.T.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 days</td>
<td>2.06</td>
<td>1.9</td>
<td>0.16</td>
<td>8.34</td>
<td>0.35</td>
<td>1.28</td>
<td>&lt;0.05</td>
<td>NS</td>
</tr>
<tr>
<td>14 days</td>
<td>2.06</td>
<td>1.7</td>
<td>0.36</td>
<td>20.35</td>
<td>0.49</td>
<td>4.00</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>21 days</td>
<td>2.06</td>
<td>1.8</td>
<td>0.26</td>
<td>30.05</td>
<td>0.63</td>
<td>2.36</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>28 days</td>
<td>2.06</td>
<td>1.9</td>
<td>0.80</td>
<td>44.76</td>
<td>0.86</td>
<td>3.63</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
</tbody>
</table>
The mean score of size 2.06 before treatment which was brought down to 1.9 after 7 days, 1.7 after 14 days, 1.8 after 21 days and 1.9 after 28 days of treatment 44.76% relief. This result was statistically significant.

Overall Effect of Therapy

**Table 8**

<table>
<thead>
<tr>
<th>Result</th>
<th>No.of Patients</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cured</td>
<td>14</td>
<td>46.67%</td>
</tr>
<tr>
<td>Moderate improvement</td>
<td>9</td>
<td>30%</td>
</tr>
<tr>
<td>Mild improvement</td>
<td>6</td>
<td>20%</td>
</tr>
<tr>
<td>Not cured</td>
<td>1</td>
<td>3.33%</td>
</tr>
</tbody>
</table>

Discussion on Parameters

**Subjective parameters:** Pain

**Objective parameters:** Size, Tenderness, Discharge, Depth of the ulcer, Floor.

**Validity of Subjective and Objective Parameters**

**Pain:** Pain is the symptom of Dushta Vrana. Acharya Sushruta described atyartha vedana in the lakshana of Dushta Vrana and Vigat Vedana in the lakshana of shuddha vrana showing the value of the symptom. So if this symptom reduces or subsides it will show the efficacy of used drug in the management of Dushta Vrana. It shows validity of this criteria in Present Study.

**Tenderness:** Acharya Sushruta described the Sparsa asahta(tenderness) as one of the lakshan in Vrana shoph. The Tenderness is one of the symptoms of infected and spreading ulcer. So, reduction in the tenderness suggests the improvement in Dushta Vrana.
Discharge: Acharya Sushruta described the dosik sraav in Dushta Vrana along with pootipuya sravi in the lakshana of Dushta Vrana. He also mentioned nirasravi in the lakshana of Shuddha Vrana. It shows that the reduction or abolition in the discharge shows that Dushta Vrana is approaching towards the Suddha Vrana. Size – Acharya Sushruta described Atisambruta and ativivruta is the lakshna of Dushta Vrana and Samtalam, Tvagsamvarna is the Lakshna of Samyag rudha Vrana. Size is the one of the criteria of examination of ulcer according to Modern point of view.

Depth: Dushta Vrana heals by secondary intention that is from the depth. The change in depth of the vrana will shows that whether vrana is healing or not. So, depth is taken as a parameter is valid in the present study.

Floor/Base: Acharya Sushruta described Krishnapitashukladi Vrana lakshana in Dushta vrana and jihvatalaabho in the lakshana of Shuddha Vrana showing that the floor will also decide the stage of Vrana healing, hence floor is taken in the parameter in the study and this is valid for the present study, so that parameters pain, tenderness, discharge, size, depth and floor selected for the study of Dushta vrana are rationale.

CONCLUSIONS

Wound management is the back bone of surgical diseases specially when the wound is infected it’s a real challenge to heal it, the amount of antibiotics used in modern science creates lot of side effects and in a poor country like India as to the financial burden to the patients. The results of Raladi Malhar and Varadi Guggulu in Dushta Vrana are very effective. In my study 30 patients almost all the wounds become healthy in four weeks trial period 14 patients are complete heal in two months of the period other 9 patients moderately heal in short time duration.

ACKNOWLEDGEMENTS

At this moment of ecstasy in my life, I bow my head to the merciful lord. Parents are the representative of god on earth. It is beyond the reach of any language to express my pure, warm, sweet and bright flame of gratefulness to my loving mother Mrs. Malti Srivastava and Father Mr. Madan Mohan Srivastava, whose Love, support and encouragement were the initiating source, which directed me towards the progress and success in each and every step of my life. Nothing can ever absolve me of my indebtedness to the sacrifices of my parents. It is great pleasure for me to express my gratitude with profound respect to my revered guide and ultimate genius Prof. (Dr.) Pradeep Kumar Bhardwaj, Principal & H.O.D (P.G. department of Shalya and Shalakya Tantra), Rishikul Govt. P.G. Ayurvedic College and Hospital Haridwar, for his parental affection and indefatigable guidance. His constant inspiration and encouragement, the driving forces in achieving this milestone, are worth memorable.

REFERENCES

1. Rigveda-1.112.10,116,15,17,11,118,8,10.39,8
2. Yajurveda
3. Samveda
4. Atharveda-2.3.2-6,19.34.10,8.9.1-10
5. Agnipuran-31.18-36
6. Buddhakala-14.4-5,23.6
7. Kautilya Arthashastra-3.67,11.14,3.73,19.10
8. Kaadambari-102,644,329
10. A.H.Ut.-chapt-25,26, B.R.Chapt-47,48
11. Sabdakalpdrum
12. Su. Chi.-1/6
13. Dalhan chi.-1/6
14. Su.Su.21/40
15. Su.Su.22/7
16. Su.su 22/7
17. Ch.chi.25/23
18. A.H.
19. Sha. poorvakhand 7/75
20. Dalhan Su.22/7
21. Su. chi.1/134
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23. Ch. chi. 25/25-26
24. Su. su. 28/9-6
25. Su.su. 28/9-10
26. Su. su. 28/11-12
27. Ch.chi. 25/26-27
28. Su. su. 22/13
29. A.S.ut.29/7-11
30. A.H. ut.25/5-11
31. Su.su 22/12
32. Ma.ni. 42/2-4
33. Ch.chi 25/13
34. Ch.chi 25/13
35. Ch.chi 25/13
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37. A.S .ut. 29/14-17
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45. Ch.chi 25/10
46. Su.su 21/36
47. Su.chi 1/7
48. Su.su. 23/18
49. Taber’s encyclopedia
50. S. Das , A Concise text book of surgery
51. Baiely and Love’s short practice of surgery
54. Wikipedia.org/wiki/infection
55. S.Das.concise textbook of surgery
56. Boyd’s Pathology
57. Schwartz’s principales of surgery
58. SRB’S Manual of surgery
59. Davidson’s Principles and practice of Medicine
60. Fundamentals of Medical Statistics