A CLINICAL STUDY TO EVALUATE THE EFFICACY OF YOGAAMRUTO RASA IN KITIBHA KUSTHA W.S.R. TO PSORIASIS.
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ABSTRACT:
Rasa Shastra is a partially independent branch of Ayurvedic medicine, which deals with preparation of the drugs with metals and minerals to produce the drugs with higher efficacy in lower dose with good palatability. Skin is the most common organ to get afflicted with diseases in human. Almost 12.4% among the total patients that approach for treatment to general practitioners complain of skin related ailments. Ayurveda classified all the skin diseases under a single heading called ‘Twagamaya’. This ailment was added amongst the eight grave diseases in virtue of their painful influence on human body and psychology. Kitibha Kustha is one among them categorized as Kshudra Kustha and Sadhya Kustha in Ayurveda. Kitibha Kustha can be correlated to Psoriasis with many similarities. Yogaamruto Rasa (YMR) is Rasashaadhi mentioned in Rasa Kamdhenu indicated for all types of Kustha. Parada (Mercury), Gandhaka (Sulphur), Tamra churna (Copper), Vatsanabh (Aconitum ferox), Vacha (Acorus calamus), Trikatu (homogenous mixture of Zingiber Officinale, Piper nigrum, Piper longum), Musta (Cyperus rotundus), and Vidanga (Embelia ribes) are the main ingredients of YMR. Its clinical efficacy was evaluated in 30 patients of Kitibha kustha by preparing a special case proforma based on the signs and symptoms mentioned in classics. Therapy was found to be statistically extremely significant (P<0.0001) in Syava, Kinakharasparsa, Parusam, Rookshatvam, Kandu, Utsannata, Disturbance in sleep, Redness and Scaling. Significant relief was observed in Auspitz phenomenon (p=0.0223). Whereas insignificant for Pitting of nails (p=0.0828) and Koebner’s phenomenon (p=0.0816)

Key words: Twagamaya, Kitibha kustha, Yogaamruto rasa.

INTRODUCTION: Kustha (obstinate skin diseases including leprosy) is the disease which causes discontinuation and discoloration of skin. In India the rate varies from 0.44 to 2.8%, it is twice more common in males compared to females, and most of the patients are in their third or fourth decade at the time of presentation¹. All skin diseases and almost all diseases that afflict skin are classified under the single heading ‘Twagamaya’. Kustha occurs due to vitiation of three doshas (humors) and four dhatus (Twak, mamsa, Rakta, ambu). Though all types of Kusthas are due to vitiation of above seven factors, predominance of specific doshas results in difference of signs and symptoms. Kitibha kustha is Vata-Kaphaja in origin² according to Acharya Charaka. It is correlated with Psoriasis of contemporary science elucidated as chronic and non-infectious skin disease characterized by well defined slightly raised, dry erythematous macules with
silvery and typical extensor distribution. A special case proforma was prepared taking the signs and symptoms both from ayurveda and contemporary science. 30 patients were evaluated for these parameters and given scoring. Follow up was carried out at on 10th, 20th, 30th day. Based on the scoring obtained paired ‘t’ test was applied by using Graph pad prism software between the scoring of first day and 30th day to evaluate the efficacy of Yogaamruto rasa.

MATERIAL AND METHODS: It’s an open, non-group, non-randomised clinical trial. Total 30 patients were selected from OPD of Department of Panchakarma and Department of Rasa Shastra and Bhaishyja Kalpana, S.V. Ayurvedic Hospital, Tirupati. Study was approved by Institutional Ethics Committee with approval no. IEC SVAYC/15/RS/22 dated 26/03/15.

Inclusion criteria:
- Patients aged between 16-70 years were selected irrespective to Sex, Religion, and Occupation.
- Patients with typical features narrated in the classics under the heading of Kitibha Kustha with signs and symptoms from contemporary science.

Exclusion criteria:
- Diabetes mellitus
- Tuberculosis
- Leprosy
- Coronary heart disease
- Any other types of Kustha

Investigations: Laboratory investigations were carried out before and after treatment to rule out any other pathological conditions as well as to record any specific change by the treatment Routine haematological examinations like,
- Hb%, TLC, DLC, E.S.R.
- L.F.T, R.F.T.

Assessment criteria: The assessment criteria were developed on the basis of symptoms and signs quoted in ayurvedic classics. The following are the lakshanas incorporated for scoring.
- Syava
- Kinakharasparsa
- Parusham
- Rookshatvam
- Kandu
- Utsannata
- Disturbance in Sleep
- Pitting of nails
- Redness
- Scaling
- Auspitz phenomenon
- Kobner’s phenomenon

The assessment is done on the first day of reporting and on the last day of treatment that is 30th day.

Dose:
- Internal Therapy: Yogaamruto rasa orally
- Dose: 250 mg
- Frequency: twice a day after meals
- Anupana (vehicle of transport): Jaggery
- Duration of study: 30 days
- Follow up: 0, 10th, 20th, 30th day.

Statistical analysis:
Statistical test for comparison was done by Paired ‘t’ test by using Graph pad prism software.

Diet:
- Pathya- Laghu anna (easily digestible food), Purana anna (food older than one year), Mudga pulse (green gram)
- Apathya- Guru anna (heavy digesting foods) Amla rasa (sour food items) dominating food, Curd, Fish, Tila (excess sesame oil containing food), lavana rasa (salty food items).

OBSERVATION AND RESULTS: The demographic data of 30 patients obtained by questionnaire showed that maximum
26.6% were between 51-60 years age group, 66.66% of the patients were male, 93.33% of patients were Hindus, 86.6% were married, 56.66% belonged to rural area, 46.66% were belonged to middle class, 90% of patients were educated, 36.6% belonged to labour group, 73.33% were consuming mixed diet, 30% patients were having Samaagni, disturbed sleep was reported by 60% of patients, 46.66% were having Vata- Pitta prakruti, 80% had normal bowel habit, 60% of patients reported that they face some kind of emotional stress in their life, Onset of Kitibha Kustha was reported as insidious in 70% of patients, 43.33% had cold climate as aggravating factor, 50% had chronicity less than one year.

Table No. 1: Showing effect of Yogaamruto rasa on parameters in 30 patients:

<table>
<thead>
<tr>
<th>Parameters</th>
<th>-n-</th>
<th>Mean Before Treatment (B.T.)</th>
<th>Mean After Treatment (A.T.)</th>
<th>Mean difference</th>
<th>Relief %</th>
<th>S.D.</th>
<th>S.E.</th>
<th>‘t’</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syava</td>
<td>28</td>
<td>2.17</td>
<td>.78</td>
<td>1.39</td>
<td>64.0</td>
<td>0.91</td>
<td>.017</td>
<td>8.04</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Kinakharasparsa</td>
<td>30</td>
<td>2.56</td>
<td>0.83</td>
<td>1.7</td>
<td>66.4</td>
<td>0.94</td>
<td>0.17</td>
<td>10.05</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Parusam</td>
<td>30</td>
<td>2.26</td>
<td>1.43</td>
<td>0.83</td>
<td>36.7</td>
<td>0.64</td>
<td>0.11</td>
<td>7.04</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Rookshatvam</td>
<td>29</td>
<td>2.72</td>
<td>1.51</td>
<td>1.20</td>
<td>44.1</td>
<td>0.49</td>
<td>0.09</td>
<td>13.23</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Kandu</td>
<td>27</td>
<td>3.22</td>
<td>122</td>
<td>2.0</td>
<td>62.11</td>
<td>0.83</td>
<td>0.16</td>
<td>12.49</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Utsannata</td>
<td>29</td>
<td>2.48</td>
<td>1.24</td>
<td>1.24</td>
<td>50.0</td>
<td>0.91</td>
<td>0.16</td>
<td>7.32</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Disturbance in sleep</td>
<td>26</td>
<td>1.92</td>
<td>.61</td>
<td>1.30</td>
<td>67.7</td>
<td>0.78</td>
<td>0.15</td>
<td>8.45</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Pitting of nails</td>
<td>19</td>
<td>2.42</td>
<td>2.26</td>
<td>0.15</td>
<td>6.1</td>
<td>0.37</td>
<td>0.08</td>
<td>1.83</td>
<td>0.0828</td>
</tr>
<tr>
<td>Redness</td>
<td>23</td>
<td>2.17</td>
<td>.78</td>
<td>1.39</td>
<td>64.0</td>
<td>0.72</td>
<td>0.15</td>
<td>9.23</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Scaling</td>
<td>30</td>
<td>2.26</td>
<td>.63</td>
<td>1.6</td>
<td>70.7</td>
<td>1.15</td>
<td>0.21</td>
<td>7.71</td>
<td>&lt;0.0001</td>
</tr>
<tr>
<td>Auspitz phenomenon</td>
<td>27</td>
<td>2.0</td>
<td>1.63</td>
<td>.37</td>
<td>18.5</td>
<td>.79</td>
<td>0.15</td>
<td>2.43</td>
<td>0.0223</td>
</tr>
<tr>
<td>Koebner’s phenomenon</td>
<td>11</td>
<td>2.0</td>
<td>1.45</td>
<td>0.55</td>
<td>2.7</td>
<td>.93</td>
<td>0.28</td>
<td>1.93</td>
<td>0.0816</td>
</tr>
</tbody>
</table>

Note: -n- No. of patients suffering with symptom, B.T.: Arithmetic mean of scoring Before Treatment, A.T.: Arithmetic mean of scoring After Treatment, S.D.: Standard Deviation, S.E.: Standard Error, ‘t’ value: Indicates significance of treatment on specific symptom. S.D. S.E. ‘t’ and p-value are calculated substituting ‘n’ value as actual number of patients suffering from that specific symptom (But not the total number of patients).

Inference of statistical reports: Statistically Extremely significant relief (P<0.0001) was seen in Syava, Kinakharasparsa, Parusam, Rookshatvam, Kandu, Utsannata, Disturbance in sleep, Redness and Scaling. Significant relief was observed in Auspitz phenomenon.
(p=0.0223). It was found to be statistically insignificant for Pitting of nails (p=0.0828).

Table no. 2: Showing overall assessment of Clinical trial:

<table>
<thead>
<tr>
<th>Result</th>
<th>No. of Patients</th>
<th>% Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete remission</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>Marked Improvement</td>
<td>15</td>
<td>50.00</td>
</tr>
<tr>
<td>Improvement</td>
<td>14</td>
<td>46.66</td>
</tr>
<tr>
<td>No improvement</td>
<td>01</td>
<td>3.33</td>
</tr>
</tbody>
</table>

The therapy had shown marked improvement in 50.00% of patients, improvement in 46.66% of patients whereas no improvement was noticed in 3.33% of patients.

DISCUSSION: Kitibha Kustha is classified as Kshudra kushta and Vata-kaphaja in origin. According to Susruta all kusthas have involvement of Krimi. Chief ingredients of YMR are Parad (Mercury), Gandhaka (Sulphur), Tamra churna (Copper), Vatsanabha (Aconitum ferox), Vacha (Acorus calamus), Trikatu (homogenous mixture of Zingiber Officinae, Piper nigrum, Piper longum), Musta (Cyperus rotundus), and Vidanga (Embelia ribes). Parad is yogavahi, kusthashghna (anti-leprotic), sodhana (purifies body), ropana (healing action) and tridoshaghna (pacifies all three dosha). Gandhaka has Vata-kaphahara effect, deepana (increase digestive power), amapachana (helps digestion), kandughna (anti-pruritic), krimighna (anti-helmintic), vishahara (anti-poisonous), rasayana (rejuvenating). Tamra is having kusthaghna, krimighna, vishaghna properties. Vatsanabha is said to be yogavahi, rasayana and kusthaghna, it acts as vata-kphhasamaka. Vacha is medhya, krimihara and sulaghnna, bhutahghna it pacifies Vata-kapha. Trikatu is having twaka dosha hara (cures skin ailments), deepana, agnideepana properties, and Vata-Kaphahara effect. Musta is krimihara, kandughna, vata-kapahara.

Charaka delineated Vidanga best among all krimihara drugs. It is mentioned in krimighna and kusthara gana, also Susruta has mentioned it in Pippilyadi varga which also has Krimighna properties. After looking the individual properties of ingredients present in YMR it can be understood that YMR have Vata-Kaphahara, Kusthghna and Krimighna gunas that provided significant result for most of the complaints.

CONCLUSION: Kitibha Kustha is categorized as Kshudra Kustha and Sadhya Kustha in Ayurveda texts. The person suffering from Kitibha Kustha looks terrific because of ugly look. This condition can be embracing and socially disabling. Despite of great advancement in dermatology and the advent of powerful steroids Kitibha Kustha continues to challenge the best efforts of dermatologists. Yogaamruto rasa is mentioned in Rasa Kamdhenu for all types of Kustha. Its efficacy was evaluated in 30 patients of kitibha kustha. After thoroughly analysing the analytical data derived out of clinical study, it is presumed that the Yogaamruto rasa has significant effect on Kitibha Kustha by relieving the major symptoms of the disease. It is also observed that there are no side effects observed during the entire process of study.
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