STUDY THE EFFECTS OF RUKSHA UDWARTANA BY HARITAKI, BIBHITAKI AND SHWETACHANDANA CHURNA IN STHAULYA

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ABSTRACT

Obesity is a gift of the modern age of machines and materialism. It occurs as a result of lack of physical activity with increased intake of food. The industrialization, stress during the work, dietary habits, lack of exercise and various varieties among the daily diet e.g. fast food, frozen fruits, increased amount of soft drinks and beverages results in the clinical entity which we can call as obesity. In ayurveda, sthaulya is considered as one of the ninditpurusha, Acharya Charaka has explained the swasth purush as sama mamsa, samapramana, sama samhanana and having drudh indriyas. Acharya Charaka mentioned Ruksha Udwartana in the management of sthaulya, while Acharya bhavaprakash mentioned the Ruksha properties of haritaki, bibhitaki and shwetachandana. Acharya Sushruta described Udwartana as kapha–Medovilayana which are the main dosha-dushya in sthaulya. In this way we can overcome the increasing burden of obesity.

KEYWORDS: Sthaulya, Ruksha udwartana, Haritaki, Bibhitaki, Shweta-chandana.

INTRODUCTION

The nature has taught the man how to be healthy before the science has discovered the laws of health. But, it is an irony of the fate that on this earth on one hand millions do not get enough food and roam in a skeletal appearance while on the other hand, there are many more who. Besides over eating leads a sedentary life to march towards an untimely death.
Sthaulya is one among the major diseases of modern era. In modern era with continuous changing life styles and environment, change diet habits, man has become the victim of many disease caused by unwholesome dietary habits and obesity is one of them.

In Ayurveda, sthula purusha is considered as one of the nindita purusha. Acharya Charaka has explained the swastha purusha as sama mamsa, sama pramana, sama samhanana and having dridha indriyas. But sthula person is not having such qualities. Regarding this explanation is available in ayurvedic classics.

Acharya Charaka mentioned Ruksha Udwartana in the management of sthaulya, while Acharya bhavaprakash mentioned the Ruksha properties of haritaki, bibhitaki and shwetachandana. Acharya Sushruta described Udwartana as kapha–Medovilayana which are the main dosha-dushya in sthaulya.

**Inclusive criteria**
- Patients of age group 16-60 years of either sex willing for trial.
- BMI 25-40KG/M².

**Exclusive Criteria**
- Patients having Obesity secondary to chronic disease.
- Patients suffering from major illness or disease hypertension, DM etc. and any major previous surgical illness unsuitable for Udwartana.
- Pregnant and lactating woman.

**Withdrawal criteria**
- On occurrence of serious events.
- Patients not giving proper follow up.

**MATERIAL AND METHODS**
Subjects, Haritaki Churna, Bibhitaki Churna, Shwetachandanai Churna, Measuring tape, weighing machine.

**Selection of patients and duration of study**
In these study 50 patients was randomly included after screening by inclusion and exclusion criteria. Trial group includes 25 patients for evaluation of effects of ruksha udwartana by Haritaki, Bibhitaki and Shwetachandana churna along with pathya ahara-vihara. Control
group includes 25 patients was given pathya ahara-vihara with regular Follow – up on 0th, 30th day, 60th day and 90th day.

**Plan for Udwartana**
- Dose of drug for preparation: all three drugs are in equal quantity.
- Dose of drug for application: as per area occupied.
- Time: daily at morning before bath for 30-45 minutes in upward direction.
- Site: whole body
- No pre & post medication was given.

**Assessment criteria**

**Subjective criteria**
1) **Kshudha-adhikya (increase appetite) (1meal=350gm diet)**
   - As usual/routine = 0
   - Slightly increased (1meal extra with routine diet) = 1
   - Moderately increased(2meal extra with routine diet) = 2
   - Markedly increased (3 meal extra with routine diet) = 3

**Objective criteria**
1. Waist & hip ratio(w/h)
2. BMI (body mass index)

**OBSERVATION**

**Table 1:** Showing the effect of therapy on Kshudha-adhikya in trial group (recorded before and after treatment).

<table>
<thead>
<tr>
<th>Trial group</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.</th>
<th>Wilcoxon’s singed rank W</th>
<th>P value</th>
<th>Decision based on P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.T.</td>
<td>2.04</td>
<td>0.73</td>
<td>0.14</td>
<td>36</td>
<td>0.006</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>A.T.</td>
<td>1.72</td>
<td>0.54</td>
<td>0.10</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P < 0.05 = Significant

**Table 2:** Showing the effect of therapy on Kshudha-adhikya in control group (recorded before and after treatment).

<table>
<thead>
<tr>
<th>Control group</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.</th>
<th>Wilcoxon’s singed rank W</th>
<th>P value</th>
<th>Decision based on P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.T.</td>
<td>1.96</td>
<td>0.73</td>
<td>0.14</td>
<td>3</td>
<td>0.34</td>
<td>P&lt;0.05</td>
</tr>
<tr>
<td>A.T.</td>
<td>1.88</td>
<td>0.66</td>
<td>0.13</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
P < 0.05 = Significant

- **Table 3:** Showing the effect of therapy on body mass index in trial group (recorded before and after treatment).

<table>
<thead>
<tr>
<th>Trial group</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>t-table</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT-AT</td>
<td>1.712</td>
<td>0.845</td>
<td>0.169</td>
<td>7.779</td>
<td>&lt;0.05</td>
<td>2.06</td>
</tr>
</tbody>
</table>

P < 0.05 = Significant

- **Table 4:** Showing the effect of therapy on body mass index control group (recorded before and after treatment).

<table>
<thead>
<tr>
<th>Control group</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>t-table</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT-AT</td>
<td>0.9409</td>
<td>0.5336</td>
<td>0.1067</td>
<td>5.253</td>
<td>&lt;0.05</td>
<td>2.06</td>
</tr>
</tbody>
</table>

P < 0.05 = Significant

- **Table 5:** Showing the effect of therapy on waist-hip ratio in trial group (recorded before and after treatment).

<table>
<thead>
<tr>
<th>Trial group</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>t-table</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT-AT</td>
<td>0.0042</td>
<td>0.003</td>
<td>0.0006</td>
<td>5.134</td>
<td>&lt;0.05</td>
<td>2.06</td>
</tr>
</tbody>
</table>

P < 0.05 = Significant

- **Table 6:** Showing the effect of therapy on waist-hip ratio control group (recorded before and after treatment).

<table>
<thead>
<tr>
<th>Control group</th>
<th>Mean</th>
<th>S.D.</th>
<th>S.E.</th>
<th>T</th>
<th>P</th>
<th>t-table</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT-AT</td>
<td>0.00048</td>
<td>0.00058</td>
<td>0.00011</td>
<td>1.659</td>
<td>&lt;0.05</td>
<td>2.06</td>
</tr>
</tbody>
</table>

P < 0.05 = Significant

**DISCUSSION**

**Kshudha-adhikya**

In trial group the p value 0.006 is less than 0.05. It means the treatment given is effective, while in control group the p value 0.345 is greater than 0.05. It means the treatment given is not effective.

**Body mass index**

In trial group and control group, when paired-test is applied the value of t-calculated is more than “t” table. It means the effect of treatment is significant on body mass index for both the groups. While the comparison of effect of therapy on body mass index in trial and control group unpaired t-test is applied the value of t-calculated is more than t-table. It means the effect of treatment given in trial group is more effective than control group.
Waist – hip ratio
In trial group, when paired-test is applied the value of t-calculated is more than “t” table. It means the effect of treatment is significant on waist-hip ratio and in control group, when paired-test is applied the value of t-calculated is less than “t” table. It means the effect of treatment is insignificant on waist-hip ratio.

CONCLUSION
The trial group shows positive effects over control group mostly for the kshudha-adhikya and waist-hip ratio. Ruksha udwartana by haritaki, bibhitaki and shwetachandana along with diet and exercise overcomes obesity more rapidly than only diet and exercise.

REFERENCES