EFFICACY OF ASHWAGANDHADYARISHTA IN VATAJA MADATYAYA W.S.R. TO ALCOHOL WITHDRAWAL SYMPTOMS

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ABSTRACT
Alcohol blocks social and economic development and even threatens to overwhelm the health services. Alcohol is strongly associated with a wide range of mental health problems. Depression, anxiety, drug misuse, nicotine dependence and self-harm are commonly associated with excessive alcohol consumption. In Ayurveda the disease produced due to improper use of Madya is called Madatyaya. Symptoms of Vataja Madatyaya are comparable to alcohol withdrawal syndrome. Previous Clinical researches done on Ashwagandhadyarishta shows its very good effect on Anxiety neurosis and its symptom like nervousness, palpitation, tremors, headache, anorexia, fatigue, irritability, lack of concentration, etc. Present study shows significant result in symptom of Vataja Madatyaya like Shwasa, Sharirkampa, Prajagarana, Parshwashool.

Key words: Madya, Vataja Madatyaya, Ashwagandhadyarishta

INTRODUCTION
With more than half of all alcohol drinkers in India falling into the criteria for hazardous drinking, alcohol abuse is emerging as a major public-health problem in the country. In Ayurveda, that which produces Mada is called Madya, the disease produced due to improper use of Madya is called Madatyaya. One should take the Madya with food materials and judiciously. Madatyaya is produced when person takes the Madya without considering Prakriti, Satmya, Agni, etc. Madatyaya is a Tridoshaja Vyadhi mainly Kapha Sthana is vitiated along with Agni. Once the person get addicted to alcohol, even if he wants to quit it withdrawal symptoms hamper his path. Symptoms of Vataja Madatyaya are comparable to alcohol withdrawal syndrome.

MATERIALS AND METHODS
AIMS AND OBJECTIVES OF THE STUDY
1. Conceptual and clinical study of “Vataja Madatyaya”. Conceptual
and clinical study of “Alcohol withdrawal symptoms”.

2. To assess the clinical efficacy of “Ashwagandhadyarishta” in the management of “Vataja Madatyaya”.

A. STUDY DESIGN

Type of Study -

a) Randomized single blind clinical study.

b) Patients will be observed before and after treatment.

Place of Study -

Total 40 patients were taken from Drug De-addiction centre Kurukshetra, Haryana. Medicines are given to the patient and daily regimen which includes early morning yoga and exercise in the evening, beside the individual and group counseling sessions as per their schedule.

Selection of Patients -

A special Performa of case paper was designed to collect and record the information verbally reported by the patients. Here the signs and symptoms of Vataja Madatyaya described by the classics and AUDIT Scale were used as a tool for screening of the patients. Consent of the patients was taken prior to commencement of clinical trials.

Selected patients for the clinical trials were divided into 2 groups

GROUP A : Trial Group: -

20 patients were included in this group. They were given the trial drug as per the following dosage schedule.

<table>
<thead>
<tr>
<th>Table No.-1 Showing Dosage Schedule:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Trial drug</td>
</tr>
<tr>
<td>2. Sevankala</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>4. Anupan</td>
</tr>
<tr>
<td>5. Kalavadhi</td>
</tr>
</tbody>
</table>

GROUP B: Control Group - 20 patients were included in this group. They were given the placebo drug (distilled water coloured by colouring agent caramel).

Counseling by Experts - Simple but regular counseling on individual, spouse and family level was done to all patients. Patients were made aware about the hazards of Madatyaya. The nature of disorder was explained and reassurance was given. The patient was helped to deal with emotional problems.

Inclusion criteria

a) Age group of 18 yrs and above.

b) Patients those having signs & symptoms of Vataja Madatyaya as mentioned in Ayurvedic texts.

c) AUDIT (THE ALCOHOL USE DISORDERS IDENTIFICATION
TEST) was used for the screening of Alcohol dependent patients.

- **Exclusion criteria**
  a) Occasional drinkers
  b) Patient in emergency condition due to Alcohol.
  c) Patient having associated chronic disorders like ascitis, splenomegaly etc.

- **Parameter of Evaluation**

  **Subjective Parameters:** The symptoms of Vataja Madatyaya which were looked into specifically Shwasa, Sharirkampa, Parshwashul, Prajagrana, Pralap. The study drug Ashwagandhadyarishta is composed of 28 herbal drugs

**Observation**

Table No-2: out of 40 patients incidence of symptoms of vataja madatyaya is following:

<table>
<thead>
<tr>
<th>Signs and Symptoms</th>
<th>Group A (n=20)</th>
<th>Group B (n=20)</th>
<th>Total (n=40)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Shwasa</td>
<td>8</td>
<td>40</td>
<td>8</td>
</tr>
<tr>
<td>Sharirkampa</td>
<td>13</td>
<td>65</td>
<td>15</td>
</tr>
<tr>
<td>Parshwashul</td>
<td>9</td>
<td>45</td>
<td>10</td>
</tr>
<tr>
<td>Prajagrana</td>
<td>16</td>
<td>80</td>
<td>14</td>
</tr>
<tr>
<td>Pralapa</td>
<td>8</td>
<td>40</td>
<td>7</td>
</tr>
</tbody>
</table>

**Result:** Obtained observations were analyzed statistically with the help of INSTAT GRAPHPAD 3 & the obtained results are as follows:

**Table No 3: An Effect on Subjective parameters: (Wilcoxon matched paired single ranked test)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Group</th>
<th>Mean BT</th>
<th>Mean AT</th>
<th>Mean Diff.</th>
<th>% Relief</th>
<th>SD±</th>
<th>SE±</th>
<th>P</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shwasa</td>
<td>Gr. A</td>
<td>0.75</td>
<td>0.25</td>
<td>0.5</td>
<td>66.67</td>
<td>0.76</td>
<td>0.17</td>
<td>0.015</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Gr. B</td>
<td>0.45</td>
<td>0.35</td>
<td>0.10</td>
<td>22.22</td>
<td>0.31</td>
<td>0.06</td>
<td>0.500</td>
<td>IS</td>
</tr>
<tr>
<td>Sharirkampa</td>
<td>Gr. A</td>
<td>1.00</td>
<td>0.40</td>
<td>0.60</td>
<td>60</td>
<td>0.58</td>
<td>0.12</td>
<td>0.0005</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td>Gr. B</td>
<td>1.00</td>
<td>0.90</td>
<td>0.10</td>
<td>10</td>
<td>0.31</td>
<td>0.06</td>
<td>0.500</td>
<td>IS</td>
</tr>
<tr>
<td>Parshwashul</td>
<td>Gr. A</td>
<td>0.55</td>
<td>0.25</td>
<td>0.30</td>
<td>54.54</td>
<td>0.47</td>
<td>0.11</td>
<td>0.031</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>Gr. B</td>
<td>0.60</td>
<td>0.50</td>
<td>0.10</td>
<td>16.67</td>
<td>0.31</td>
<td>0.06</td>
<td>0.500</td>
<td>IS</td>
</tr>
<tr>
<td>Prajagrana</td>
<td>Gr. A</td>
<td>1.2</td>
<td>0.45</td>
<td>0.75</td>
<td>62.50</td>
<td>0.55</td>
<td>0.12</td>
<td>0.0001</td>
<td>HS</td>
</tr>
<tr>
<td></td>
<td>Gr. B</td>
<td>1.3</td>
<td>1.05</td>
<td>0.25</td>
<td>19.23</td>
<td>0.44</td>
<td>0.09</td>
<td>0.0625</td>
<td>IS</td>
</tr>
<tr>
<td>Pralapa</td>
<td>Gr. A</td>
<td>0.50</td>
<td>0.30</td>
<td>0.20</td>
<td>40</td>
<td>0.41</td>
<td>0.9</td>
<td>0.125</td>
<td>IS</td>
</tr>
<tr>
<td></td>
<td>Gr. B</td>
<td>0.35</td>
<td>0.20</td>
<td>0.15</td>
<td>42.86</td>
<td>0.36</td>
<td>0.08</td>
<td>0.250</td>
<td>IS</td>
</tr>
</tbody>
</table>

Note: S= Significant IS=Insignificant HS= Highly significant

**Table No 4: Intergroup Vataja Madatyaya Symptoms comparison in Group A & Group B (Mann-Whitney Test)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Groups</th>
<th>Mean Diff.</th>
<th>SD±</th>
<th>SE±</th>
<th>P</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shwasa</td>
<td>A</td>
<td>0.500</td>
<td>0.761</td>
<td>0.170</td>
<td>0.0257</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>0.100</td>
<td>0.308</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>-----</td>
<td>-----</td>
<td>----</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>Sharirkampa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.600</td>
<td>0.598</td>
<td>0.134</td>
<td></td>
<td>0.0014</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>0.100</td>
<td>0.308</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parshwashul</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.300</td>
<td>0.470</td>
<td>0.105</td>
<td></td>
<td>0.0616</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>0.100</td>
<td>0.308</td>
<td>0.068</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prajagrana</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.750</td>
<td>0.550</td>
<td>0.123</td>
<td></td>
<td>0.0022</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>0.250</td>
<td>0.444</td>
<td>0.099</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pralapa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.200</td>
<td>0.410</td>
<td>0.092</td>
<td></td>
<td>0.348</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>0.150</td>
<td>0.366</td>
<td>0.082</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: S= Significant IS=Insignificant HS= Highly significant

DISCUSSION ON RESULTS

1. Effect on Shwasa
Trial Group A Shows 66.67 % improvement in Shwasa which is statistically significant on the other hand Group B shows improvement of 22.22% which is statistically insignificant. Intergroup comparison shows statistically significant result (p value is 0.0257) which states that there is significant difference between efficacy of Trial drug and Control placebo groups.

2. Effect on Sharirkampa
Trial Group A Shows 60% improvement in Sharirkampa which is statistically highly significant on the other hand Group B shows improvement of 10% which is statistically insignificant. Intergroup comparison shows statistically highly significant result (p value is 0.0014) which states that there is significant difference between efficacy of Trial drug and Control placebo groups. Alcohol has a slowing effect on the brain and over the period of time brain adjust its own chemistry to compensate for the effect of the alcohol.

3. Effect on Parshwashul
Trial Group A Shows 54.54% improvement in Parshwashul which is statistically significant on the other hand Group B shows improvement of 16.67% which is statistically insignificant. Intergroup comparison shows statistically insignificant result (p value is 0.0616) which states that there is no significant difference between efficacy of Trial drug and Control placebo groups.

4. Effect on Prajagrana
Trial Group A Shows 62.5% improvement in Prajagrana which is statistically highly significant on the other hand Group B shows improvement of 19.23% which is statistically significant. Intergroup comparison shows statistically highly significant result (p value is 0.0022) which states that there is significant difference between efficacy of Trial drug and Control placebo groups.

5. Effect on Pralapa
Trial Group A Shows 40% improvement in Pralapa which is statistically insignificant on the other hand Group B shows improvement of 42.86% which is statistically insignificant. Intergroup comparison shows statistically insignificant result (p value is 0.348) which states that there is no significant difference between efficacy of Trial drug and Control placebo groups.
The Pralapa is the symptom seen in the second stage of Mada and after the withdrawal gradually the symptom reduces and after the srotoshodhana by Ashwagandhadyarishta as channels become free from Doshas the patient’s perception becomes normal.

The above said symptoms manifest due to vitiation of vata in srotas. The above symptoms are more specific of Vataja Madatyaya and one can correlate it with acute alcohol withdrawal symptoms. Alcohol withdrawal is the change that the body goes through when a person suddenly stops taking alcohol after chronic alcohol use. Alcohol is centrally acting depressant drug. Hence stoppage of alcohol indeed lead to neural excitation or sudden rise of functions of autonomic nervous system manifesting in term of increase in respiratory rate, increased pulse rate, fine tremors, sleep disturbance, depression, anxiety etc. The effect observed in trial drug may be attributed chiefly due to effect of Ashwagandha because of its anti-depressant, anti-convulsant and anti-anxiety effect. Alcohol dependence appears like okasatmya. So, some form of alcohol (Ashwagandhadyarishta) can be given to prevent withdrawal.

The Vatanulomaka drugs of Ashwagandhadyarishta like Ashwagandha, Haritaki, Yashtimadhu, Ananta(Shveta Sariva), Shyama(Krishna Sariva), Vacha, Shunthi, Tvaka, Ela, Patra help in normal movement of Vata. The Medhya drugs like Ashwagandha, Haritaki, Mustaka, Shveta Chandana, Vacha, Pippali, Nagakeshara help to calm the hyper-excitability of brain. Its Srotoshodhaka drugs like Maricha, Shunthi, Haritaki, Madhu clean the various channels of Srotasas which leads to Anuloma Gati of Vata and help in Samprapti Vighatana.)

Its main ingredient Ashwagandha possesses various pharmacodynamic properties, which include tikta, kashaya and madhura rasa, madhura vipaka and ushna virya, laghu and snigdha guna, rasayana, vrishya, balya, vishaghna and nidrajanana in prabhava. It is a classical rasayana drug, which possesses potent anti-stress effects. It is an immuno-modulator which strengthens the immune system of human body. Ashwagandha has a role in high blood pressure, peptic ulcers, immune depression and insomnia, having an anabolic, body building, restorative and aphrodisiac effect. The alkaloids in ashwagandha have been found to be sedative, anti-bacterial, anti-tumor, anti-inflammatory and hepatoprotective.

CONCLUSION

Clinical researches done on Ashwagandhadyarishta shows its very good effect on Anxiety neurosis and its symptom like nervousness, palpitation, tremors, headache, anorexia, fatigue, irritability, lack of concentration, etc. As we know that all above symptoms are also seen in alcohol withdrawal.

By this study we can conclude that Ashwagandhadyarishta is a good drug for treating Vataja Madatyaya patients and it also strengthens the chikitsa sutra or line of treatment given by Ayurvedic classics.
REFERENCES

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