CLINICAL EFFICACY TWAKNAGAPUSHPADI CHURNA (PANA) IN MADATYAYA W.S.R. TO CHRONIC ALCOHOLISM

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ABSTRACT
The habit of alcohol consumption leads to its addiction and causes alcohol intoxication. In this modern era because of globalization, there is more stress on human beings like increasing demand from family & friends, competitive work in occupational area; lifestyle disorders etc. are pushing employees, executives & even common men into high pressure. To resolve this problem number of people will go for addiction & one of which very common is that of alcohol. It is a drug which gives pleasure & relaxation to millions. The average alcohol consumption goes to higher level i.e. excessive doses, it makes improper metabolism to create ‘Vriddhi’ and painful crises in body. If alcohol (Madya) consumption goes to higher level i.e. excessive doses, it suppresses immunity of body and make ‘Oja kshaya’ termed as Madatyaya, also sometimes it result to death. According to W.H.O. study, alcohol related problems account for more than 1/5th of hospital admissions, 18% of psychiatric emergencies, more than 20% of all brain injuries and 60% of all injuries reporting to India’s emergency room. The average alcohol-dependent person decreases his or her life span by 10 to 15 years, and alcohol contributes to 22,000 deaths and two million nonfatal injuries each year. In Ayurveda Twaknagapushpadi Churna has mentioned by Acharya Sushruta in context of Madatyaya, because it fulfills the main chikitsa siddhant given in different ayurveda texts and can be easily prepared by using easily available component drugs like Twak, Dhanyak, Ela, Jiraka, Maricha, Nagkeshara, Pippali, Madhuka, (Shu.Utt. 47/31, Pg. 336) and can be easily prepared by using easily available and also normalizes the Rasavaha srotodushti which is the main aspect in the samprapti. As it is useful in Sarvavidha Madatyaya.

KEYWORDS: Madya,Madatyaya, Twaknagapushpadi Churna.

INTRODUCTION
According to Ayurveda, there are 10 gunas (properties) of poisons by which it act on body. These are Ruksha, Ushna, Tikshna, Sukshma, Ashu, Vyavayi, Vikasi, Vishada, Laghu and Apaki (Su.Kalp.Chapter 2) & Anirdehshya rasa (Ch.Chi Chapter 24) which exactly similar with all gunas (properties) of Madya except Apaki or Anirdehshya ras. Instead of Apaki or Anirdehshya rasa, Madya has Amla rasa. So the Madya is appropriately termed as Vraddha, by which Madya is so harmful causing opposite effects on body that’s way it first make improper metabolism to create 'Dhatu shaithilya’ and painful crises in body. If alcohol (Madya) consumption goes to higher level i.e. excessive doses, it suppressed immunity of body and make ‘Oja kshaya’ termed as Madatyaya, also sometimes it result to death. According to W.H.O. study, alcohol related problems account for more than 1/5th of hospital admissions, 18% of psychiatric emergencies, more than 20% of all brain injuries and 60% of all injuries reporting to India’s emergency room. The average alcohol-dependent person decreases his or her life span by 10 to 15 years, and alcohol contributes to 22,000 deaths and two million nonfatal injuries each year. In Ayurveda Twaknagapushpadi Churna has mentioned by Acharya Sushruta in context of Madatyaya, because it fulfills the main chikitsa siddhant given in different ayurveda texts.

AIM AND OBJECTIVES OF THE STUDY
To find out the efficacy of “Twaknagapushpadi Churna (pana)” clinically in Madatyaya or Chronic alcoholism

OBJECTIVES
1. To carry out the conceptual and clinical study of “Madatyaya” or “Chronic Alcoholism”.
2. To assess the clinical efficacy of “Twaknagapushpadi Churna (pana)” in the management of “Madatyaya”.

To compare the results of treatment group with placebo group
Study Design

Type of study

a) Randomized single blind clinical study.
b) Patients were observed before and after treatment.

Place of study

Total 60 patients were taken for Clinical trial was conducted at PRAYAS De-addiction Rehabilitation and Research Centre, Kolar road, Bhopal. Here, patients are admitting for 8-10 weeks on IPD basis and treated according to the need of patient and daily regimen, which includes early morning yoga, exercise in the evening, gardening, physical, and mental games, beside the individual and group counseling sessions as per their schedule.

Selected patients for the clinical trials were divided into two groups

Trial Group (Group A): 30 patients were included in this group with Daily regimen. They were given the trial drug as per the following dosage schedule.

Control Group (Group B): 30 patients were included in this group. They were given the placebo drugs.

Regular assessments were taken on 20th, 40th and 60th day respectively.

Counseling by experts of De-addiction centre: 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 patients were helped to deal with emotional problems.

Inclusion criteria

1) All the patients were diagnosed & assessed thoroughly on the basis of Ayurvedic classical signs & symptoms.
2) Age group above 18 yrs and below 70 yrs of age.
3) Patients consuming Alcohol more than 01 years.

Exclusion criteria

1. Age below 18 yrs – As the number of patients of this category was Negligible at the centre.
2. Occasional drinkers and Patient in emergency condition due to alcohol.

Patients with high risk diseases e.g. Diabetes Mellitus, hypertension, severe jaundice, advanced stage of liver cirrhosis, Advanced stage of liver cirrhosis, ascitis etc. there severe medical illness. Parameter for Evaluation:

Subjective Parameters

The symptom of Madatyaya are Shwasa, Aruchi Daha, Trushna, Sharira kampa, Jwara.

Objective Criteria

1. Total S. bilirubin is done.

OBSERVATION AND RESULT

Table 2: Overall Effect of Group A and Group B.

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete remission</td>
<td>02</td>
<td>00</td>
</tr>
<tr>
<td>Markedly Improved</td>
<td>12</td>
<td>00</td>
</tr>
<tr>
<td>Moderate Improved</td>
<td>13</td>
<td>00</td>
</tr>
<tr>
<td>Mild Improved</td>
<td>03</td>
<td>12</td>
</tr>
<tr>
<td>Unchanged</td>
<td>00</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 3: An Effect on Subjective pare meter: (Wilcoxon matched paired single ranked test).

<table>
<thead>
<tr>
<th>Chief complains</th>
<th>Group</th>
<th>Mean score</th>
<th>% Relief</th>
<th>S.D.</th>
<th>S.E.</th>
<th>t’</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shwasa</td>
<td></td>
<td>B.T. Mean ± S.D</td>
<td>A.T. Mean ± S.D</td>
<td>90</td>
<td>0.774</td>
<td>0.141</td>
<td>17.22</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.7±0.466</td>
<td>0.267±0.450</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2.6±0.466</td>
<td>1.667±0.479</td>
<td>38.25</td>
<td>0.669</td>
<td>0.122</td>
<td>3.46</td>
</tr>
<tr>
<td>Trushna</td>
<td></td>
<td>B.T. Mean ± S.D</td>
<td>A.T. Mean ± S.D</td>
<td>73.53</td>
<td>.479</td>
<td>0.087</td>
<td>19.03</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.267±0.450</td>
<td>0.600±0.498</td>
<td>36.89</td>
<td>0.61</td>
<td>0.112</td>
<td>2.204</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2.8±0.407</td>
<td>1.767±0.430</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daha</td>
<td></td>
<td>B.T. Mean ± S.D</td>
<td>A.T. Mean ± S.D</td>
<td>77.50</td>
<td>0.25</td>
<td>0.046</td>
<td>44.61</td>
</tr>
<tr>
<td></td>
<td>A</td>
<td>2.667±0.479</td>
<td>0.600±0.498</td>
<td>45.21</td>
<td>0.7112</td>
<td>0.130</td>
<td>4.46</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2.433±0.504</td>
<td>1.333±0.661</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Hence it can be said that drug Deepana, Pachana brings properties of

Deepana and srotosodhaka and vattapitta shamak properties of drug. Deepana, pachana brings out digestion of amadosha and clarifying rasadhusti and hence proper formation and nourishment of rasadhutu.

DISCUSSION

Effect on Shwasa
Trial Group A Shows 90 % improvement in Shwasa which is statistically highly significant on the other hand Group B shows improvement of 38.25% which is statistically significant. Intergroup comparison shows there is a significant difference between both the groups in treating and Group A is more significant than Group B that the level of P<0.01. Hence it can be said that drug Twaknagapushpadi Churna is highly significant to treat the Shwasa symptom of Madatyaya than placebo.

Effect on Trushna
Trial Group A Shows 73.53% improvement in Trushna which is statistically highly significant on the other hand Group B shows improvement of 36.89% which is statistically significant. Intergroup comparison shows there is a significant difference between both the groups in treating and Group A is more significant than Group B that the level of P<0.05. Hence it can be said that drug Twaknagapushpadi Churna is significant to treat the Trushna symptom of Madatyaya than placebo.

Acharya Charaka says Trushana present in Madatyaya should be treated itself by madya. The effect observed in trial group may be due to properties of Deepana, Pachana and srotosodhaka and vattapitta shamak properties of drug. Deepana, pachana brings out digestion of

Table 5: Effect on Totle S. Bilirubin Test.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Mean Diff.</th>
<th>SD±</th>
<th>P</th>
<th>S</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>2.133</td>
<td>0.67</td>
<td>&lt;0.01</td>
<td>S</td>
</tr>
<tr>
<td>B</td>
<td>0.453</td>
<td>0.568</td>
<td>&lt;0.50</td>
<td>LS</td>
</tr>
</tbody>
</table>

Intergroup - 0.849 <0.001 HS

Effect on Aruchi
Trial Group A Shows 64.49 % improvement in Aruchi which is statistically significant on the other hand Group B shows improvement of 25.78% which is statistically insignificant. Intergroup comparison shows there is a high significant difference between both the groups in treating and Group A is more significant than Group B that the level of P<0.001. Hence it can be said that drug Twaknagapushpadi Churna is highly significant to treat the Aruchi symptom of Madatyaya than placebo group.

Aruchi means anorexia or no desire of food intake. As the patients of Madatyaya roga have also improper digestion, anorexia is often there. The reason for good result in Group A contains mostly Deepana, Pachana drugs. So it helps to cure Anorexia.

Effect on Sharira Kampa
Trial Group A Shows 80.14% improvement in Sharira Kampa which is statistically highly significant on the other hand Group B shows improvement of 41.85% which is statistically insignificant. Intergroup comparison shows there is a significant difference between both the groups in treating and Group A is more significant than Group B that the level of P<0.001. Hence it can be said that drug Twaknagapushpadi Churna is significantly effective to treat the Sharira Kampa symptom of Madatyaya than placebo group.
comparison shows there is a high significant difference between both the groups in treating and Group A is more significant than Group B that the level of P<0.001. Hence it can be said that drug Twaknagapuspadi Churna is highly significant to treat the Sharira Kampa symptom of Madatyaya than placebo group. Alcohol has a slowing effect on the brain and over the period of time brain adjusts its own chemistry to compensate for the effect of the alcohol.

Effect on Jwara
Trial Group A Shows 48.84% improvement in Jwara which is statistically highly significant on the other hand Group B shows improvement of 23.43% which too is statistically insignificant. Intergroup comparison shows there is a high significant difference between both the groups in treating Jwara and Group A is more significant than Group B at the level of P<0.001. Hence it can be said that drug Twaknagapuspadi Churna is highly significant to treat the Jwara symptom of Madatyaya than placebo group. Incidence of this symptom may be probably due to Rasa dhatu dushhi. Srotordhika of rasavaha srotas leads to vimargamana of pitta dosha and hence manifesting with jwara. Moreover in chronic alcoholics, the basal body temperature is usually raised due to dilatation of blood vessels. The effect observed may be due to these compounds having Pachana, Deepana, drugs.

Effect on Totle S. Bilirubin Test
Twaknagapuspadi Churna (Group A), mean difference of Total Bilirubin (mg/dl) showed decrease of 1.033, whereas in Placebo group there is decrease of 0.453 showing the insignificance in treating and Upon comparing between the groups for the same there is high significant difference was observed and Group A was found to be more significant than Group B.

Probable Mode of Action of Twaknagapushpadi Churna
Twaknagapuspadi Churna contains eight drugs. These drugs is effective in the disease Madatyaya due to their Deepana, Pachana, Rasayana, Preenana, Madahara, Medhya, Srotoshodhana, Aamapachana, Rasayana and Vatunulomana properties. In Twaknagapuspadi churna most of the Dravya are having Laghu, Ruksha and Tikshna Gunas. All these Guna helps in increasing Dhatvagni, by enhancing the basal metabolic rate. These also help in digestion of undigested matter and their removal. Laghu and Ruksha Guna are mainly Kaphahara. Tikshna Guna due to predominance of Agni Mahabhuta acts on the channels immediately and remove the obstruction by pacifying the Kapha. Ruksha Guna has absorption property thereby helped in removing obstruction by pacifying the Kapha. Also it is Kaphaghna. Kapha is one of the main Dosha in the Samprapti of Madatyaya. Acharya Charak mentioned if all the Doshas are equally aggravated, then Kapha should be treated first .It’s also have balya brimhana and Rasayana drugs which increases oja Rasayana properties of dravyas also regulates the metabolism and gives immunity and strength.

Madatyaya is Tridoshaja Vyadhi affecting mainly Vata-Pitta Prakriti personalities. sobering Vata- Pitta Shamaka it helped in Samprapti Vighatana of Madatyaya.Deepana Karma of the katu, Tikta rasa helps in Jatharagni and Dhatvagni Deepana. Excessive intake of alcohol leads to agnivikriti and prolonged duration of it leads to formation of Amavisha i.e toxins accumulation at various sites chiefly concerned at liver and brain tissue level. Katu, Tikta rasa by virtue of deepana and pachana guna normalizes the agni and there by promoting the proper formation and nourishment of dhatus. Along with the help of katu and tikta rasa, it helps in digestion of Ama dosha and also clarifying the srotodusti leading to normalization of vayu gati in srotas. While describing the treatment Acharya Charak clearly states that during treating Madatyaya, alcohol should be administered because when a Kshara (alkaline) substance gets mixed with a sour substance, the outcome becomes sweet in taste, and therefore in place of alcohol the Anupana having the Amla taste.

Anupana as a vehicle for the delivery of the drugs at the level of pathogenesis because by the virtue of properties laghu and sukshma guana it reaches directly to the target organs and shows its karma maximum contents of these drug have ushna Virya. Upadhyaya et.al in 1979 at BHU, Varanasi has proved that the substance having Ushna Virya are accountable for increasing the basal metabolic rate, oxygen consumption and accelerate the breakdown of fat at mitochondrial level. According to Ayurveda, Ushna Virya helps in pacifying Kapha and Vata. Raised metabolic rate helps in fast destruction of cell debris and clearing the micro channels. As the micro channels are cleared the Vata become Anuloma that is how Samprapti Vighatana occurs. Twaknagapuspadi churna 50% Dravyas have Madhur Pipaka and 50% Dravyas have Katu Pipaka. Madhura Pipaka might have helped in Samprapti Vighatana as-Vataghna, Vata Anulomana.

Totally there is a significant result found in Trial Group A that is Twaknagapushpadi Churna upon Control Group B
Madatyaya is Tridoshaja Vyadhi, due to Vata and Pittaghna Karma it may have helped in Samprapti Vighatana. Madhura Pipaka may pacifies to vitiated Vata, Oja, Hridaya and cooling effect (Shamana) on the Dhatus and Srotas

CONCLUSION
Clinical researched done on Twaknagapushpadi Churna shows it’s good effect on anorexia, dyspnoea, thirst, burning sensation fever, insomania, tremor, palpitation etc.it’s shows also good effect in improvement in serum bilirubin level.so it have hepatoprotective and anti-inflammatory action. By this study we can conclude that Twaknagapuspadi Churna is good drug for treating
Madataya patient and it also strengthens the chikitsa sura or line of treatment given by ayurvedic classics.

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