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AN UPASHYATMAKA (THERAPEUTIC) STUDY OF ASWAGANDHA CHURNA IN RAKTAGATA VATA (HYPERTENSION)

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ABSTRACT

Acharaya Charaka explained the symptoms of *Raktagata Vata* under the context of *Vata Vyadhi* which very much resembles hypertension. It is the 'Silent Killer' of mankind. It is commonly asymptomatic, readily detectable, and usually easily treatable and of uncured them often leads to lethal complication. *Kapha Dosha* complements the effect of vitiated *Vata* and adds the progression of diseases, along with the vitiation of psychological factor viz. *Raja*& *Tama Doshas*. The main progression occurs in *Rasa* - *Rakta Dhatu*. In the present clinical study, 30 patients of *Raktagata Vata* (hypertension), were treated with *Ashwagandha churna* for 60 days and the effect of drug on sign and symptoms were evaluated. The trail drug has shown encouraging symptomatic relief in most of the clinical features with significant reduction in systolic and diastolic blood pressure. During the trial period the treated patients had shown no side effects of the drug.

Keywords: *Raktagatavata*, Hypertension, *Ashwagandha churna*

INTRODUCTION

Among the noted health problems, *Raktagata vata* (hypertension) is a most troublesome disease, considering its incidence, chronicity and long-term complications. If this disease is not properly managed, it damages the *Tri-mammas* which are the vital parts of our body leading to early death. Although there has been widespread dissemination of knowledge of hypertension, it is poorly treated in most of the populations including India. Lifelong and palliative treatment for hypertension in modern science induces many side effects. Therefore, to attain and to maintain good health, hypertensive patients are looking towards *Ayurveda* for safe and cost-effective management. In *Ayurveda* the symptoms of *Raktagata Vata* very much resemble hypertension[1]. *Aswagandha* (Withaniasomnifera) has been popular in *Ayurvedic* drugs for thousands of years because its energies body and improves longevity, but its potent anti - stress and anti-anxiety effect helps to reduce hypertension[2]. So,the present study effort isto assess the *Upashyatmaka* (Therapeutic) effect of *AswagandhaChurna* in clinically diagnosed case of *RaktagataVata* (Hypertension).

Aim and objective.

To assess the *Upashyatmaka* (Therapeutic) effect of *AswagandhaChurna.* in clinically diagnosed case of *Raktagata Vata* with special reference to hypertension.

Material and Methods

Selection of patient of *Raktagata Vata* will be done randomly according to the proforma prepared for present clinical study, total 30 patient will be selected from the OPD and IPD of GACH, Patna.

Inclusion Criteria: -

1. Selection of patients will be done irrespective of sex, socioeconomical status.
2. Patients of age group 20-70years are taken.
3. Patients having classical symptoms of *Raktagata Vata* given in *Samhitas* will be taken.
4. Patient having BP less than 160/100 mmHg are taken.

Exclusion Criteria: -

1. Pregnant women and lactating mother.
2. Patient suffering from genetical and congenital diseases.
3. Immunocompromised patients are not taken.
4. Patient having any complication likes diabetes and cancer.
5. Patients having BP more than 160/100 mmHg are excluded.

Investigations done for the Study:

- Routine hematological investigation such as CBC, ESR.
- Biochemical tests like LFT, RFT, lipid profile.
- They were also subjected to ECG wherever required. These investigations were conducted to exclude any other underlying pathology.

Posology

Drug used: -*ASHWAGANDHA CHURNA*

- **Preparation**: *Churna*
- **Dose**: 5 mg twice a day
- **Duration**: 60 days
- ***Anupana****: Sukhoshna Jala* / milk
- ***Kala*****:** after meal
- **Route of administration: -**oral

Follow up: For all 30 patients the drug has been prescribed for 60 days. The patients have been reviewed after every 15 days. A total of 4 follow ups have been done to assess subjective and objective criteria.

Criteria for Assessment:

On the basis of cardinal sign:

Cardinal sign is persistent elevated blood pressure. By noting the alteration in the systolic and diastolic blood pressure.

Table 1: Systolic and diastolic score

	Diastolic score			Systolic score		
		Range (Mm of Hg)	Score		Range (mm of Hg)	Score

1	Normotension	<90	0	Normotension	<140	0
2	Mild	90- 99	1	Mild	140-159	1
3	Moderate	100- 109	2	Moderate	160-179	2
4	Severe	110-119	3	Severe	180-199	3
5	Very Severe	>or =120	4	Very severe	>or=200	4

Table2: subjective criteria grading score.

Sl. No.	Signs and Symptoms	Absent	Mild	Moderate	Severe
1	*Ruja*	0	1	2	3
2	*Santap*	0	1	2	3
3	*Vaivernya*	0	1	2	3
4	*Krishata*	0	1	2	3
5	*Aruchi*	0	1	2	3
6	*Arunshi*	0	1	2	3
7	*Bhojanoprantstabdhata*	0	1	2	3
8	Headache	0	1	2	3
9	Palpitation	0	1	2	3
10	Epistaxis	0	1	2	3
11	Dyspnoea	0	1	2	3
12	Dizziness	0	1	2	3
13	Chest Pain	0	1	2	3

Table3: Objective parameters Assessment

Objective Parameters	B.T.	A.T.
Hb%		
TLC		
ESR		
Total cholesterol		
Sr. Triglyceride		
Blood Urea		
Sr. Creatinine		
Total Bilirubin		
Direct Bilirubin		
Indirect Bilirubin		
S.G.O.T.		
S.G.P.T.		
ALP		
Sr. Albumin		
Sr. Globulin		

Observations and result

In the present study it was observed that in the series of 30 patients of *Raktagatavata*(Hypertension), maximum number of patients i.e., 33.33% were registered between the age group of 51-60 years.Percentage of male and female were 66.67% and 33.33% respectively.Majority of cases in present study were married I,e 93.33%. Positive family history of Hypertension was found in 63.33 % of the patients. Most of the patients (86.67%) studied were mixed dietMost of the Patients i.e., 53.33% was having irregular bowel hab-

its. In this study majority of the patient's i.e., 40% had disturbed sleep .In this study, 60% patients were of *Vata-Pitta Prakriti*, 23.33% were having Vata-*kaphaj Prakriti*, and 13.33% were of *pitta-Kaphaja prakriti*.The majority of the patients 53.33% in the present study were having tea addiction, while incidence of tobacco was 16.67%.

Result on subjective parameter

The trial drug provided significant effect in *Ruja* (56.72%), *Santap* (57.14%), *Vaivernya* (59.26%), *krishta* (57.45%), Headache (58.18%), Palpitation (56.86%), Dyspnoea (57.69%). Dizziness (58.90%), chest pain (56.45%). while the effect on *Aruchi, Arunshi, Bhojanoprantstbdhata*, Epistaxsis was found insignificant.

Result on blood pressure

Effect of drug on blood pressure provided statistically significant relief in diastolic B.P. (57.14%), Systolic B.P. (61.00%)

Result on objective parameters

Effect of drug on objective Parameters Provided Statistically significant relief in TLC, total cholesterol and Sr. Triglycerides, rest other parameters were found insignificant.

Overall effect of drug

In this study (28 patients) effect of drug of that, maximum number of patients (71.43%) showed moderate improvement and 28.57% of patients showed mild improvement. None of the patients showed marked improvement or no improvement.

Table 4: showing the effect of drug on objective Parameter.

Objective Parameters	Mean		Diff	SD	SE	t-Value	P-Value	% Change	Result
	BT	AT							
Hb%	11.60	11.65	0.05	1.52	0.29	0.4220	0.6764	0.43	NS
TLC	10800.00	11200.00	400.00	234.56	44.33	2.5026	0.0187	3.70	Sig
ESR	20.30	19.98	0.32	2.65	0.50	1.2365	0.2269	1.58	NS
Total Cholesterol	201.34	196.27	5.07	23.64	4.47	-2.1312	0.0423	2.52	Sig
Sr. Triglyceride	186.98	181.37	5.61	28.54	5.39	-2.0922	0.0460	3.00	Sig
Blood Urea	18.90	18.82	0.08	4.98	0.94	1.2397	0.2258	0.42	NS
Sr. Creatinine	1.23	1.19	0.04	0.87	0.16	0.6666	0.5107	3.33	NS
Total Bilirubin	1.05	1.04	0.01	0.94	0.18	1.6504	0.1104	0.95	NS
Direct Bilirubin	0.13	0.12	0.01	0.76	0.14	0.8818	0.3857	7.69	NS
Indirect Bilirubin	0.97	0.98	0.01	0.47	0.09	0.2748	0.7855	1.03	NS
S.G.O.T.	28.96	28.45	0.51	3.87	0.73	0.5643	0.5772	1.76	NS
S.G.P.T.	36.57	36.42	0.15	5.87	1.11	0.3287	0.7449	0.41	NS
ALP	189.78	188.90	0.88	21.78	4.12	1.1702	0.2522	0.46	NS
Sr. Albumin	4.14	4.10	0.04	1.98	0.37	1.3797	0.1790	0.97	NS
Sr. Globulin	3.24	3.21	0.03	1.46	0.28	0.5982	0.5547	0.96	NS

Table 5: Showing efficacy of drug on systolic blood pressure.

Systolic Score	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	1.00	1.00	0.00	0.00	-4.217[b]	0.00343	61.00	Sig
AT	0.39	0.00	0.42	0.08				

Table 6: Showing efficacy of drug on Diastolic blood pressure.

Diastolic Score	Mean	Median	SD	SE	Wilcoxon W	P-Value	% Effect	Result
BT	1.00	1.00	0.00	0.00	-4.000[b]	0.00633	57.14	Sig
AT	0.43	0.00	0.50	0.10				

Table 7: Showing the effect of drug on subjective parameter.

Subjective Parameters	Mean		SD		SE		Wilcoxon W	P-Value	% Change	Result
	BT	AT	BT	AT	BT	AT				
Ruja	2.39	1.04	0.50	0.43	0.09	0.08	-4.802[b]	0.00157	56.72	Sig
Santap	2.50	1.07	0.51	0.47	0.10	0.09	-4.774[b]	0.00180	57.14	Sig
Vaivarnya	1.93	0.79	0.26	0.42	0.05	0.08	-5.013[b]	0.00054	59.26	Sig
Krishta	1.68	0.71	0.61	0.46	0.12	0.09	-4.669[b]	0.00302	57.45	Sig
Aruchi	1.82	1.76	0.67	0.61	0.13	0.08	-1.817[b]	0.60345	3.37	NS
Arunshi	2.61	1.07	0.50	0.54	0.09	0.10	-4.750[b]	0.00203	58.90	Sig
Bhojanoprantsatbdhata	2.43	2.39	0.50	0.47	0.10	0.05	-1.777[b]	0.77959	1.59	NS
Headache	1.96	0.82	0.33	0.48	0.06	0.09	-5.013[b]	0.00054	58.18	Sig
Palpitation	1.82	0.79	0.67	0.57	0.13	0.11	-4.716[b]	0.00241	56.86	Sig
Epistaxsis	1.86	1.79	0.76	0.63	0.14	0.12	-1.817[b]	0.61345	3.62	NS
Dyspnoea	1.86	0.79	0.59	0.57	0.11	0.11	-4.817	0.00146	57.69	Sig
Dizziness	2.61	1.07	0.50	0.38	0.09	0.07	-4.768[b]	0.00186	58.90	Sig
Chest Pain	2.21	0.96	0.57	0.33	0.11	0.06	-4.756[b]	0.00198	56.45	Sig

Table 8: Overall effect of drug

Overall Effect	No of Patients	Percentage
Marked Improvement (> 75%)	0	0.00%
Moderate Improvement (50-75%)	21	75.00%
Mild Improvement (25-50%)	7	25.00%
No Change (<25%)	0	0.00%
TOTAL	28	100.00%

DISCUSSION

30 patients of *Raktagatavata* (Hypertension) were registered for the proposed study out of these 2 patients discontinued before completion of the course against medical advice Hence, the 28-patient turned up for complete follow Ups. The study showed that males (66.7%) were more predominant for hypertension than female. Maximum number of patients was observed in middle class 56.67% families. The majority of the patients, who came for the treatment (53.33%), were having the illness with the duration 1-2 years. *Manasika prakriti* majority were of *Rajasa prakriti* i.e.,73.33%. In Rajasika prakriti, due to excess of '*Rosha Ansha'* all emotions like *Krodha, Shoka, Bhaya,Chinta* etc. appear in them in their full exaggerated form, and they can face the critical stressful situation after consolation or after being convinced by someone. So, they are more prone to develop psycho somatic disorders. The drug (Ashwagandha churna) provides relief in symptoms like *Ruja* (56.72%), *Santap* (57.14%), *Vaivernya* (59.26%), *krishta* (57.45%), Headache (58.18%), Palpitation (56.86%), Dyspnoea (57.69%). Dizziness (58.90%), chest pain (56.45). While the effect on *Aruchi, Arunshi, Bhojanoprantstbdhata*, Epistaxis was found

insignificant. The effect of drug on blood pressure provided statistically significant relief in diastolic B.P. (57.14%), Systolic B.P. (61.00%). Effect of drug on objective Parameters Provided Statistically significant relief in TLC, total cholesterol and Sr. Triglycerides, rest other parameters was found insignificant.

Probable mode of action of drug

Ashwagandha is *Kaphavatashamak*[3]. Milk or *Ushnodaka* is the *Anupana* of *Ashwagandha churna*. Milk due to its Swadhu, Sheeta, Mridu, Snigdha *Guna* is *Vata Pitta Shamaka,Jivaniya* and *Rasayana*. Total action in combined is *Tridoshasamaka*. Also,*Ushnodaka* having *laghu Guna*, clears *Srotovarodham*, it disintegrates *Kapha*, and carries *Pitta* and *Vata* in their normal site. As we know Hypertension is *VatapittapradhanTridoshajVyadhi*.

CONCLUSION

- *Ashwagandha Churna* helped in reducing both systolic and diastolic pressure.
- The plus point observed in the case of *Ayurvedic* management is absence of any hazardous effect, which is really a great benefit to the patient and is of vital importance in view of the global acceptance of *Ayurveda*.
- As most of the patients hailed from age group of above 51-60 years, ageing is an important factor in occurrence of hypertension.
- As in this study direct relationship is found between ageing and occurrence of this disease. It is suggested that *Rasayana drug* like *Ashwagandha* which have *Hridaya* and *Medhya* properties should be used.
- Thus, it is obvious from the above observations at significant level that *Ashwagandha churna* provided relief in *Ruja, Santap, Vaivernya, Krishta*, Headache, Palpitation, Dyspnoea, Dizziness, chest pain and not significant relief was observed in *Aruchi, Arunshi, BhojanoprantStabdhata*, and Epistaxis.
- In Objective Parameter Provided Statistically significant relief is TLC Total cholesterol and Sr. triglycerides, rest was showing insignificant result.
- Most of the patient's effect of drug was observed that, maximum number of patients (71.43%) shows moderate improvement and (28.57%) of patients shows mild improvement.
- None of the patients showed marked improvement or No improvement. So, above mentioned regimen has been found to be effective in the management of uncomplicated cases of *Raktagatavata* (hypertension) with less duration of illness.

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