

A CLINICAL STUDY OF CHANDRA-AVLEHA, YOGASANA AND SHIRODHARA WITH MANSYADI KWATHA IN THE MANAGEMENT OF UCHCHA-RAKTA-CHAPA (W.S.R. TO ESSENTIAL HYPERTENTION)

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ABSTRACT

Background: Hypertension (elevated arterial blood pressure) is one of the most common problems of the present times especially in industrialized countries. It accounts for about 6 % of deaths worldwide. Hypertension increases the risk of many diseases of the cardiovascular system, brain, kidneys and peripheral arteries. Here an attempt has been carried out regarding the Role of *Chandra-Avleha, Yogasana and Shirodhara with Mansyadi Kwatha* in the management of *Uchcha-Rakta-Chapa* with special reference to Essential hypertension. **Method:** 60 patients diagnosed as *Uchcha-Rakta-Chapa* in OPD and IPD of Shri NPA Govt. Ayurveda College & Hospital Raipur, Chhattisgarh were randomly divided into 3 groups. Group-A was given *Chandra-Avleha* 12 grams twice a day empty stomach with cow milk, group-B was given *Shirodhara With Mansyadi Kwatha* and *Yogasana*

(*Padmasana, Shavasana*), group-C was given was given *Chandra-Avleha* in the same manner with *Shirodhara* and *Yogasana*. The duration of study in these groups was two months.

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Symptoms of *Ucha-rakta-chapa* given in Ayurveda were considered before treatment and after treatment for the assessment. Included studies were truly randomised controlled trials.

Result: After treatment significant results were found in given symptoms such as headache, dizziness, insomnia, anger, slightly body pain with oedema, breathlessness, tympanites, anorexia, body stiffness, pyrexia, epistaxis, palpitation, lethargy, tremor, chest pain, lack of memory, but group-C was more effective. **Conclusion:** In the present study all groups showed good results in *Uchcha-Rakta-Chapa* but group-C was found better than group-A and group-B. These therapy were safe and without any side effects.

INTRODUCTION

Hypertension (elevated arterial blood pressure) is one of the most common problems of the present times especially in industrialized countries. It accounts for about 6 % of deaths worldwide. Hypertension increases the risk of many diseases of the cardiovascular system (hypertensive heart diseases), brain (cerebro-vascular strokes), kidneys (nephrosclerosis) and peripheral arteries. Hypertension is of two type viz., essential and secondary. The exact etiology of essential hypertension is still unknown. It seems to be familial or as a consequence of an interaction between environmental and genetic factors. Effective treatment of essential hypertension is also elusive.

Essential hypertension constitutes about 80-95% patients of hypertension. In India surveys conducted suggest a higher prevalence in the urban population as compared to the rural population. Thus hypertension with its ever increasing incidence and risk of more dangerous life threatening complications requires more and more thorough research and spreading of awareness in the developing countries.

In Ayurveda, Hypertension as such is not mentioned as a disease but it can be understood by assessing the involved *Doshas*, *Dooshyas* and *Srotases* etc. It can be best understood mainly as a pathological condition of the Rakta dhatu and Vyana vata. In association with these, *Prana vayu*, *Sadhaka Pitta* and *Avalambaka Kapha* are also involved in the manifestation of essential hypertension. Here an attempt has been carried out regarding the Role of *Chandra-Avleha*, *Yogasana* and *Shirodhara* with *Mansyadi Kwatha* in the management of *Uchcha-Rakta-Chapa* with special reference to Essential hypertension.

Aims and Objectives

To evaluate the efficacy of *Chandra-Avleha*, *Yogasana* and *Shirodhara* with *Mansyadi Kwatha* in the management of *Uchcha-Rakta-Chapa* w.s.r. to essential hypertension.

MATERIAL AND METHOD

The clinical study is based on the classical explanations with scientific well designed research protocol, which enumerates the patient before to administrate the trial drug to after effects in comparison of clinical as well as in biochemical parameters. This clinical trail is Simple Random sampling technique clinical study. In this Patients were taken in randomized selection. In this present clinical study, 60 subjects were enrolled, who fulfilled the inclusion criteria were taken for the study with follow up observation were taken for observation and statistical analysis.

Selection of patients

Subjects of either sex diagnosed for *Uchcha-Rakta-Chapa* on the basis of Classical Clinical Features are selected from OPD and IPD of Shri N.P.A. Government Ayurvedic College & Hospital Raipur, Chhattisgarh. The study was approved by the institutional ethics committee (IEC). Informed consent was obtained from all patients before their recruitment for this study.

Inclusion criteria

1. Patients having classical symptoms of *Uchcha-Rakta-Chapa*.
2. Patients between age groups of 30 and 70 years.
3. Patients having persistent systolic blood pressure of more than 140 mm of Hg and diastolic blood pressure of more than 90 mm of Hg without any known causes were selected for the study.
4. Recently diagnosed (< 6 Months).
5. Not taking any anti-hypertension drugs.

Exclusion criteria

1. Patients <30 years and >70 years.
2. Patients of Diabetic hypertension.
3. Patients with severe hypertension.
4. Patients with renal disorders.

5. Diabetes with severe complications such as tuberculosis other pyogenic infection, blindness, stroke, etc.
6. Pregnant and lactating mothers.
7. Patients with recurrent infections.

Lab Investigations

1. Complete blood count.
2. Urine examination- microscopic and routine.
3. Serum parameters- lipid profile, serum creatinine, blood urea, blood sugar.
4. Chest X-ray, USG and ECG (if required).

DIAGNOSTIC CRITERIA

Patients were diagnosed on the basis of signs and symptoms related to *Uchcha-Rakta-Chapa* laid down in Ayurvedic Classics and Essential Laboratory Findings. They are given as follows in assesment criteria.

Criteria for Assessment- Assessment criteria and grading of the results criteria for diagnosis categories; cardinal sign, subjective and objective parameters.

On the basis of cardinal sign- That is persistent elevated blood pressure. By noting the alteration in the systolic and diastolic blood pressure, before and after treatment.

Subjective Parameters

Parameters	Grading Of Parameters			
	G0	G1	G2	G3
1. Shirashula (Headache)	Absent	Headache on over work	Some time sever headache	All time Headache
2. Bhram (Dizziness)	Absent	2-3 time per week	2-3 time per day	All time
3. Nidranash (Insomnia)	Absent or 2 time	Absent of deep sleeping	4-6 time rising	6-8 time rising on night
4. Krodh (Anger)	Absent	Some time	On Special topic	On any small topic
5. Mandruk-shof (Slightly Body Pain With Oedema)	Absent	Swelling on one part of the body	Swelling on both leg	Swelling all over body
6. Shwaskruchta (Breathlessness)	Absent	Difficulty in Breathing during any work	Some time Difficulty in Breathing	All time Difficulty in Breathing
7. Adhman (Tympanites)	Absent	Abdominal Uncomfortable	After meal	With Flatulence
8. Aruchi (Anorexia)	Absent	Mild	Some time	Loss of appetite

9. Gatrastambha (Body Stiffness)	Absent	Some time Mild	Some time sever	All time
10. Santap (Pyrexia)	Absent	Mild	Some time moderate	All time present
11. Nasaraktasraw (Epistaxis)	Absent	1-2 time per month	1-2 time per week	2-3 time per day
12. Hritkampa (Palpitation)	Absent	Mild	moderate	All time present
13. Klama (Lethargy)	Absent	Mild	Some time moderate	All time present
14. Spandan (Tremor)	Absent	Mild	Some time moderate	All time present
15. Ura-shula (Chest Pain)	Absent	Mild Headache	Some time pain	All time pain
16. Smriti (Lack Of Memory)	Absent	Mild loss of memory	Some time loss of memory	Sever loss of memory

Plan of Treatment

The study was comprised of 3 groups in which 60 patients of Essential hypertension were administered as-

Group	Therapy	Duration	No. of Patients in the group
Group-A	1. Oral Medicine: <i>Chandra-Avleha</i> 12 grams twice a day empty stomach with cow milk.	60 days	20
Group-B	1. Yogasana - Padmasanna and Shwasana 2. Shirodhara - With Mansyadi Kwatha	60 days	20
Group-C	1. Oral Medicine- <i>Chandra-Avleha</i> 2. Yogasana 3. Shirodhara in the same manner as a group- A &B	60 days	20

Pathya- apathy

Patients were kept under normal diet with special restriction of excessive salt intake, deep fried, oily and spicy food. A copy of diet chart was given to each patient.

Pathya	Rice, Wheat, Green gram, Green Vegetables, Fruits, Milk, Ghee, chicken, meat, seasonal fruits, Haritaki, Amalaki. Adequate sleep at night, Body Massage, stay clean environment, Brisk walking and light exercises, Evacuation of urges like Urine, Feces etc. at proper time.
Apathya	Dahi sevan, over intake water, Pishta-anna, Guru-virudha-bhojan, Oily, fried, spicy food items, fast food, ice cream, cold drinks, curd, bread, biscuit, Alcohol, tobacco, tea, coffee. Suppression of natural urges, intercourse with Rajaswala, Ayonigaman, Fasting, Stress and strain.

Follow up study

After completion of treatment all the patients were advised to report in the O.P.D. at the regular interval of one week for at least three weeks for the follow up study. Their blood pressure after 15 minutes rest was recorded. The condition of other sign and symptoms was also noted.

Statistical Analysis- The obtained information was analyzed statistically in terms of mean score (x), standard deviation (SD), standard error (SE). t-test are carried out and percentage improvement in different assesement criteria was done at the level of 0.005, 0.01 & 0.001 of P levels. The result were interpreted as follows P> 0.005 – not significant; P<0.05- less significant ; P<0.01 – significant ; P< 0.001 – highly significant.

OBSERVATION AND RESULTS**Effect of Therapies on Cardinal Sign**

Parameters	Group- A				Group- B				Group- C			
	Mean BT	Mean AT	% Relief	P- Value	Mean BT	Mean AT	% Relief	P- Value	Mean BT	Mean AT	% Relief	P- Value
Blood pressure (mmHg)												
Systolic pressure	162.9	135.9	16.575	<0.001	156.8	136.8	12.756	<0.001	162.95	131.2	19.485	<0.001
Diastolic pressure	91.85	84.2	8.329	<0.001	93	86.3	7.205	<0.001	93.4	82.9	11.242	<0.001

Effect of Therapy on Subjective Parameters-

Parameters Sign/symptoms	Group- A				Group- B				Group- C			
	Mean BT	Mean AT	% Relief	P- Value	Mean BT	Mean AT	% Relief	P- Value	Mean BT	Mean AT	% Relief	P- Value
Headache	1.60	0.25	84.38	<0.001	1.85	0.60	67.57	<0.001	2.00	0.40	80.00	<0.001
Dizziness	2.25	0.60	73.33	<0.001	2.05	1.80	12.19	<0.05	2.35	0.45	80.85	<0.001
Insomnia	2.25	0.90	60.00	<0.001	2.20	0.60	72.73	<0.001	2.20	0.30	86.36	<0.001
Anger	2.00	0.95	57.50	<0.01	1.95	1.75	10.26	<0.05	2.55	0.30	88.84	<0.001
Slightly Body Pain With Oedema	2.00	0.30	85.00	<0.01	1.85	1.65	10.81	<0.05	2.40	0.60	75.00	<0.001
Breathlessness	1.35	0.65	51.85	<0.001	1.35	0.60	55.55	<0.001	1.50	0.80	46.67	<0.001
Tympanites	1.35	0.45	66.67	<0.01	2.15	1.90	11.63	<0.05	2.10	0.45	78.57	<0.001
Anorexia	2.00	0.70	65.00	<0.01	2.20	0.30	86.36	<0.001	2.35	0.45	80.85	<0.001
Body Stiffness	1.20	0.65	45.83	<0.02	1.55	1.30	16.13	<0.05	1.85	0.80	56.76	<0.001
Pyrexia	0.75	0.30	60.00	<0.05	2.05	2.05	12.19	<0.05	1.85	0.70	62.16	<0.001
Epistaxis	0.70	0.30	57.14	<0.02	0.85	0.55	35.29	<0.05	0.75	0.30	60.00	<0.01
Palpitation	1.90	1.00	47.37	<0.001	1.60	1.50	6.25	<0.05	2.05	0.85	58.54	<0.001
Lethargy	1.60	0.50	68.75	<0.001	2.15	1.10	48.84	<0.001	2.35	0.60	74.47	<0.001
Tremor	0.70	0.35	50.00	<0.05	1.70	1.35	20.69	<0.02	2.35	0.60	57.57	<0.001
Chest Pain,	0.95	0.45	52.63	>0.05	1.60	1.50	06.25	<0.05	1.95	0.55	71.79	<0.001
Lack Of Memory	1.15	0.45	60.87	<0.01	1.5	1.25	16.67	<0.05	2.00	0.80	60.00	<0.001

Effect of Therapy on Objectives Parameters

Parameters	Mean BT	Mean AT	SD	P-Value
Hb	11.17	13.13	1.30	<0.01S
TLC	1991.6	7766.6	1124.03	>0.1
ESR	12.25	10.18	5.70	>0.1
Blood sugar fasting	90.83	85.83	9.00	>0.1
Blood sugar PP	116.66	111.66	39.33	>0.1
Serum cholesterol	230.41	175.58	49.45	<0.02

DISCUSSION

Effect on cardinal sign

Persistent elevated blood pressure- It was found that Group A rendered 16.57% relief in systolic blood pressure and 8.32% in diastolic blood pressure. The results were statistically highly significant in lowering systolic and diastolic blood pressure. In Group B systolic blood pressure was decreased 12.75% while diastolic blood pressure, come down with 7.20% relief. In Group C systolic blood pressure was decreased 19.48% while diastolic blood pressure, come down with 11.24% relief. The result was highly significant statistically. It may be inferred that all group plays an important role in reducing both systolic and diastolic blood pressure.

Effects of Therapies on Symptomatology

The percentage of relief was higher in Group A than Group B and Group C on following symptoms; *Shira-shula* (Headache), *Mandruk-shof* (slightly body pain with oedima), *Smriti-nash* (lack of memory). It is clear from the relief in the percentage point of view that Oral Medicine provided maximum relief in *Shira-shula*, *Mandruk-shof*, *Smriti-nash*. Highly significant result was obtained in Group B while significant result obtained in Group A and Group D in *Swashkricha* (breathlessness), *Aruchi* (Anorexia). Highly significant result was obtained in Group C while significant result obtained in Group A and Group B in the symptoms of *Bhram* (Dizziness), *Nidranash* (Insomnia), *Krodh* (Anger), *Adhman* (Tympanites), *Gatrastambha* (Body Stiffness), *Santap* (Pyrexia), *Nasaraktasraw* (Epistaxis), *Hritkampa* (Palpitation), *Klama* (Lethargy), *Spandan* (Tremor) and *Ura-shula* (Chest Pain).

Over All Response of Therapies

S. N.	Results	Group A		Group B		Group C		Total Result	
		No of patient	%	No of patient	%	No of patient	%	No of patient	%
1.	76% above	03	15.00%	00	00.00%	10	50.00%	13	21.67%
2.	51-75%	11	55.00%	02	10.00%	09	45.00%	22	36.67%
3.	26-50%	06	30.00%	1	60.00%	01	05.00%	19	1.67%
4.	0-25%	00	00.00%	06	30.00%	00	00.00%	06	10.00%
TOTAL		20	100.00%	20	100.00%	20	100.00%	60	100.00%

50.00% patients of Group C showed excellent response after therapy, while 15.00% patients of Group A and 00.00% patients of Group C showed excellent response. Marked response was observed in 45.00% patients of Group C, 55.00% patients of Group A and 10.00% patients of Group C. Mild response was observed in 5.00% patients of Group C, 30.00%

patients of Group A and 60.00% patients of Group C, while 30.00% patients of Group B showed no response.

CONCLUSION

At the verge of completion of this study the final conclusion can be drawn from the deductive reasoning of the relevant information and none deceiving data comprehended in the present study. As most of the patients hailed from age group of above 40 years, though ageing is an important factor in occurrence of Essential Hypertension. In the present trial *Yogasana*, *Shirodhara* along with oral medicine offered better results in pacifying the entire range of symptomatology and mainly the cardinal signs in comparison to oral medicine alone. In oral medicine group when *Chandravleha* given alone, was also found to be effective in regression of cardinal signs as well as associated symptomatology, but it was judged to be less effective as compared to combined therapy.

As in this study direct relationship is found between ageing and occurrence of this disease. During follow up, blood pressure tended to rise after one week of discontinuation of treatment. Thus it is proposed that the medicines should be administered for longer duration. Then their effects can be assessed. From the results obtained in Group A, B and C, it can be concluded that moderate and severe ranges of *Uccha-rakta-chapa* (Essential Hypertension) can be normalized in a better way by oral medicine, *Yogasana* with *Shirodhara*, while in mild Hypertension oral medicine is effective.

As the study was conducted over a small sample, a similar study performed over a large sample for a longer period would have procured much sharper and more accurate results. Although working certain limitations, author believes that “Perfection is not limited by time and space” and has worked honestly. But then too, many mistakes may occur inadvertently. Author takes sole responsibility of such errors.

REFERENCES

1. A clinical study on the Ayurvedic Samprapti of Essential Hypertension and its management with Sarp Gandha Vati by Kale Atul (2005) K.C (I P G T & R A, GAU, Jamnagar).
2. A Critical Study on Aetiopathogenesis of Uchharaktachapa (Essential Hypertension) and its management with Virechana Yoga and Shamana Yoga (Herbal Compound) by Dr. Gurucharan Bhuyan 2004.

3. Ashtanga Hridaya with Commentaries, Sarvanga Sundara & Ayurveda Rasayana - Choukhambha Orientalia, Eight Edition, Varanasi.
4. Ashtanga Sangraha with Indu Commentary, C.C.R.A.S. New Delhi.
5. Charaka Samhita of Agnivesha with Ayurvedadipika Commentary of Chatrapani Dutta, Edited by Vaidya Yadavaji Trikamaji Acharya published by Choukhamba publication.
6. Charaka Samhita text with English translation and critical exposition based on Chakrapanidatta commentary by Dr. Ram Karan Sharma and Vd. Bhagwan Das.
7. Charaka Samhita with Commentry of Chakrapani, Jalpakalpataru Explanatory notes; and Annotations of Mahamahopadhyaya Sri Gangadhara Kaviratna Kaviraja; Edited and Revised by Kaviraja Sri Narendranatha Sengupta and Kaviraja Sri Bataicanadra Sengupta; Published by Rashtriya Samsrta Samsthana, New Delhi, Edition, 2002.
8. Dravyaguna Vigyana Part I & II by Prof. P.V. Sharma, 3rd edition, published by Choukhamba Bharati Acadami.
9. Harrison's principles of Internal Medicine 15th edition published by Tata Mc. Graw Ltd, New Delhi.
10. Hypertension – An international monograph – 2001, Edited by M Paul Anand, Published by IJCP group.
11. Hypertension India (Indian guidelines management of hypertension – 2001) published by Hypertension Society of India, By Dr Siddharth N Saha.
12. Madhava Nidana with Madhukosha Commentary by Vijayarakshita & Shrikanthadutta, edited by Yadunandan Upadyaya 30th edition.
13. Nidana Chikitsa Hastamalaka. II Vol. By Ranjitrai Desai & published by Baidyanath Ayurveda Bhavana, Nagpur.
14. Rajnighantu of Pandit Narahari, Krishanadas Academy, Varanasi.
15. Samprapti Lakshanayoha Sambandhah by K. Sadashiva Sharma, I.P.G.T. & R.A. Jamnagar.
16. Sushruta Samhita with Nibandhasangraha & Nyaya chandrika commentary edited by Yadavaji Trikamaji Acharya published by Choukhamba Orientaliya, Varanasi.
17. The Heart, Ninth edition by R. Wayne Alexander, Robert C. Schlant, Valentine Fuster.
18. Yogaratnakara - Vidyotini Hindi Commentary, 7th edition by Chaukhamba publication, New Delhi.