

CLINICAL-COMPARATIVE STUDY OF VIRECHAN & PAKSHAGHATARI GUGGULU ON PAKSHAGHAT W.R.S. TO HEMIPLEGIA

MANOJ KUMAR GUPTA¹, NEERAJ KANUNGO², DINESH SINGH GAUR³, SHRIKRISHNA SHARMA⁴, U.S NIGAM⁵ VINOD KUMAR SINGH⁶

¹Lecturer, Department of Roga and Vikriti Vijnana, Government Ashtang Ayurvedic College and Hospital, Lokmanya Nagar, Indore, Madhya Pradesh, India, ²Lecturer, Department of Kaya chikitsa, Government Ashtang Ayurvedic College and Hospital, Lokmanya Nagar, Indore, Madhya Pradesh, India, ³Lecturer, Department of Shalakya, Government Ashtang Ayurvedic College and Hospital, Lokmanya Nagar, Indore, Madhya Pradesh, India. ⁴Ex Associate Professor Department of Roga and Vikriti Vijnana, National Institute of Ayurveda, Jaipur, Rajasthan, India. ⁵Ex Principal and H.O.D. Department of Kaya chikitsa, Government Dhawantari Ayurved College and Hospital, Ujjain, Madhya Pradesh, India. ⁶Reader. Department of Kaya chikitsa, Gaur Brahman Ayurved College and Hospital, Rohtak, Haryana, India. Email: drmanoj.gupta505@gmail.com

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ABSTRACT

In the present era due to speedier change of the civilization, human habits and life style continuously changing without any consideration of their benefits or harms Adaptation of new diets, movement with fast moving vehicles, maintenance of wrong postures, avoidance or over-indulgence of exercise, suppression of natural urges, anxiety strain etc. of the present life are becoming responsible for increasing incidence of Vatavyadhi like Pakshaghat (Hemiplegia.) These diseases mostly treated by allopathic medicines (high dose of corticosteroids) which are having considerable side effects and could not be used on long term basis. So conclusion is that in these disease, the dose of allopathic medicines and disease gradually progresses and in addition due to the side effects of allopathic medicines, it is better that these diseases should be treated by Ayurvedic medicines.

Keywords: *Pakshawadh Pakshaghat and Ardhangavata etc.*

INTRODUCTION

Stroke¹ is a world-wide health problem; with incidence ranging from 0.2 to 2.5 per thousand per year according to WHO Collaborative Study in 12 countries. It accounts for 20% of neurological admissions. Till date, in India there have been only a few community based studies for either prevalence or incidence of stroke; with one reporting a prevalence rate of 334/100,000 and an incidence of 73/100,000 in 19902. Post-stroke hemiplegia is one of the most common causes of disability in adults. Prevalence of hemiplegia in South India is 56.9 per 100,000; as compared to 150 to 186 per 100,000 in the USA and Europe. Hemiplegic shoulder pain (HSP) is one of the commonest complications, occurring in about 20-72% of such patients with average figures ranges from 43 to 64%³⁻¹⁰. Kalichman and Ratmansky¹¹ reported prevalence of HSP is approximately 22%-23% in the general population of stroke survivors and approximately 54%-55% among stroke patients in rehabilitation settings. In day- today practice *Pakshaghat* disease is common in *Ayurvedic* OPD & IPD. As compare to modern medical science after Emergency manegment on *Pakshaghat*, they prescribe physiotherapy, which is not so much beneficial.

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Generally the *Vatavyadhi* is managed by *Snehan-Swedan*, *Vastikarma* etc. But according to *Charakachrya Virechankarna* is the specific treatment for *Pakshaghat* roga. In *Ayurveda* there are specific treatments for *pakshaghata*. There are two types of treatment. One is *Sodhan* therapy and second is *Shaman* therapy. *Shodan* means purification of the body by eliminating morbid *Doshas* and *Dushyas* from body through *Panchkarma*, and main principal of *Shaman* therapy is to normalize and maintain the equilibrium of all their *Doshas*. After the *Shodhan* therapy comete *Shaman* chikitsa is indicated for pacifying remnant *Doshas*.

In the present stage of socio-economic life the trend of disease management is to find out more effective, easily available and quickly responding remedies, which do not have any ill effect on health and longevity of the patient.

The modern scientific mind is not satisfied by only giving statements, no matter from what source they originate, unless and

until collaborated by clinical and experimental proof. if this could be achieved, *Ayurveda* could be brought into mass of humanity in the world.

Address for correspondence.

Lecturer, Department of roga and vikriti vijnana,
Government Ashtang Ayurvedic College and Hospital,
Lokmanya Nagar, Indore,
Madhya Pradesh, India. Email: drmanoj.gupta505@g mail.com mob: 07566212661

Aim and objectives

To evaluate the effect of *Virechan* karma in the management of *Pakshaghat* (Hemiplegia)

To assess the clinical effectiveness of *Pakshaghatari Guggulu yog* and *Virechan Karma* on *Pakshaghat* i.e. *Shodhan (virechan) Purvak Shamak Chikitsa*.

To compare the effectiveness of both i.e. *Shodhan Purvak shaman* and *Shaman Chikitsa*

Material and Method

For the present study 30 patients will be selected irrespective of their age, sex, religion etc. from OPD and IPD of Govt. Dhanwantri Ayurvedia Hospital, Ujjain. These 30 patients subdivided into 3 groups.

Group A: Patient will treat with *Virechan* therapy and after that placebo will be given total 30 days are required.

Group B: In this group after *Virechan* and *Samsarjan krama* the research drug will be given up to 30 days.

Group C: In this group only research drug will be given total course will be 30 days.

Detailing of clinical study has been projected under the following manner.

Criteria of Diagnosis

The main Criteria of diagnosis of the patient were based on cardinal as associated symptoms mentioned in classical texts and parameter of nervous system examination.

Criteria of Inclusion

Fully conscious patients

All the patients of *Pakshaghat* above the age of 20 year

Criteria of Exclusion

Unconscious patients.

Lost bowel and bladder control.

Complicated with heart diseases.

Intra cranial infection meningitis etc.

Trauma, cerebral tumor, cerebral abscess.

Marked impaired mental function.

Criteria of Assessment

scoring system was adopted for cardinal as associated sing and systems (*Doshanubandhi lakshan*).

Signs &Symptoms

Loss of speech (Vaksanga)

Normal
Speak with difficulty
Speak few words
Utter voice
Aphasia

Finger movement

Normal
Able to hold object
Unable to hold object
Slight
No

Lifting of Arm at shoulder/Leg at Hip joint (Flexion Extension)

Up to 180
Up to 135
Up to 90
Up to 45
No

Standing from sitting

Normal
Without support
With support
Unable
Normal
Mild rigidity
Moderate rigidity
Sever rigidity

Loss of Muscle power

Normal
Not against resistance
Power detachable when gravity excluded
Flicker
Complete paralysis

Loss of sensation (Achetana):-

Normal
Mild sensory loss
Moderate sensory loss
Sever to total Sensory loss

Walking time (cover given distance in time [10 meter])

Less than 1 min
Between 1-1:30 min
Between 1:30-2min
More than 2min
Can't Walk

Hand grip power by sphygmomanometer

Above 40 mm Hg
30-40 mm Hg
20-30 mmHg
10-20 mm Hg
0-10 mm Hg

Foot pressure on weighing machine

Above 40 kg
30-40 kg
20-30 kg
10-30 kg
0-10 kg

Reflexes

Normal
Brisk
Very Brisk
Clonus

Ruja (Pain)

0
No pain
Only after some extension
Less frequently
Very frequently

Gourava

Normal
Mild Gourav
Moderate Gourav
Severe Gourav
4

Sotha

No Sotha
Mild Sotha
Moderate Sotha
Severe Sotha
3

Associated signs symptoms

No deviation of face
Slightly present
Moderately present
Markedly present
2

On the basis of various haematological and biochemical parameter Routine hematological investigation like Hb, TLC, DLC, ESR. Were done before and after the treatment bio-chemical investigation like FBS and serum cholesterol were also done.

Plan of study: - *Pakshaghat* is a *Kricchsadhya Vyadhi*. The therapeutic measures should be able to assuage symptoms and provide maximum relief to the patients. Bearing this in mind patients of *Pakshaghat* were chosen from O.P.D. & I.P.D. of Govt. *Dhanwantri Ayurved* hospital irrespective of age, sex, and religion & exclusion criterion were taken into account before choosing the patients for the clinical trial. The patient was examined thoroughly and progress of the malady noted precisely weekly. Three group were made underneath is the details.

Three group were designed for the present study

Group A: - *Shodhan* group incorporated patient that were given *Shodhan* therapy i.e. *Virechan* and after placebo were given.

Group-B: - encompassed patient that were given *Shodhan* therapy than *Shaman* drug *Pakshaghatari Guggulu* is given.

Group	Details of Group	Number patients registered	of	Number of patients completed the course	Duration of course	Drug of choice
A	Shodhan group + placebo	10		10	30 days	Virechankarma + placebo
B	Shodhan therapy + Shaman drug	10		10	30 days	Virechankarma followed by pakshaghatari Guggulu
C	Shaman Group	10		10	30 days	Pakshaghatari Guggulu

Group A-Shodhan Group

10 patients were registered in this group All patients completed the course. In this category, snehan svedan than virechan karm was this is followed by dispensing of capsule of placebo Following is the schedule following in this group.

S. No.	Therapy	Time Duration	Drug and Dosage
1	Dipan Pachan	3 days	Trikatu Churna 5 gm B.D.
2	Abhyantar Snehan	5-7 days*	25-175 ml in increasing order daily increasing by 25 ml (Murchit Til tail)
3	Bahya Snehan and Svedan	3 Annakals	Murcchit til tail for Snehan, Bahya Sarwang Svedan with Dashmool Kwath.
4	Virechan karm	Morning **	Haritaki - 20 gm Trivrita - 20 gm Aragvadha - 20 gm Kutaki - 20 gm 200 ml kwath of above drug was prepared 30 ml Erand tail was added to it.
5	Samsarjan Karm	3-7 days***	Peya, Vilepi, Akritiyush, krit yush, Akrit krishara, Krit Krishara Ardhahar, Purnaharar in chronological order***
6	Placebo	15 days****	Glucose Capsule Dose - 2 BD

*Dependa on *Samyak Snigdha Lakhans*.

**Empty stomach in the morning 9:00 A.M.

***Depends on *Shudhi Prakar Uttam, Hin Madhyam*.

****Depends on *Shudhi*:

Total Duration of course 30 days step 1-6 was followed in systemic order

Method of prepration

Method of prepration *Murcchit til tail and Virechan* has been described in Drug review section.

Mode of Dispensing

Glucose was dispended in the form of capsule of 125mg.

Anupan:-Anupan of *Virechan kalp* & placebo is Leukwarm water.

Aushadhkal:-*Virechana kalp* in preribed in morning hours after sunrise at 9:00 A.M. placebo given after meals.

Group B:-*Shodhan* therapy than *Shaman* drug group 10 patients were registered in this group all patient completed this course: In this category, *Snehan svedan* than *Virechan karm* was performed this was succeeded by *Samsarjan karm* which relied in the type of *Shudhi* achieved in *Virechan*. Thes is following in the schedule followed in this group

S. No.	Therapy	Time Duration	Drug and Dosage
1	Dipan Pachan	3 days	Trakatu Churna 5 gm B.I.D.
2	Abhyantar Snehan	5-7 days*	25-75 ml in increasing order daily increasing by 25 ml* Drug = Murchit Til tail
3	Bahya Snehan and Svedan	3 Annakals	Murcchit til tail for Snehan, Bahya Svedan with Dushmool Kwath.
4	Virechan karm	Morning **	Haritaki - 20 gm Trivrita - 20 gm Aragvadha - 20 gm Kutaki - 20 gm 200 ml Kwath of above drug was prepared 30 ml Erand tail was added it.
5	Samsarjan Karm	3-7 days***	Peya, Vilepi, Akrit, krit, yush, Akrit, Krishara, Krit, Krishara, Ardhahar, Purnahar in chronological order***
6	Shaman drug	30 days****	Pakshaghatari Guggulu**** Dose 5 gm BID

*Depends on *Samyak snigdha lakshan*.

**After sunrise in the morning 9:00 A.M.

***Depends on *shudhi prakar-Uttam, Hin Madhyam*.

***Depends on *shudhi* total duration of course 30 days step 1to 6 was followed in systemic order.

Method of preparation

Method of *murcchit til tail* and *virechan kalp* has been described in drug review section

Method of Dispensing

Pakshaghatari Guggulu was dispensed in the form of pouch according to dose.

Anupan

Anupan of *virechan kalp* and *Pakshaghatari Guggulu* is Leukwarm water.

Anushadhkal

Virechan kalp is deseribed in morning hours after sunrise at 9.00 A.M.& *pakshaghatari Guggulu* is given after meals.

Group C- Shaman Group

10 patients were registered in the group and all patients completed this course *Pakshaghatari Guggulu* was administered to 10 patients.

Method of Preparation

Method of preparation has been specified in drug review section.

Mode of Dispensing

1gm tablet given for 2 gm BID Dose for 30 days duration.

Dose and Anupana : 2gm BID with lukewarm water

Aushadhkal :After meals.

Statistical Analysis

The result of the therapy was assessed after accomplishment of the treatment All the available data was statically analyzes by applying

"period test " The calculated value was compared with tabulated value and the Sequel assessed at various probabilities The results obtained were interpreted as :-

Significant -p < 0.01

Highly Significant -p < 0.001

Observation and results**Table1: Total Effect Cardinal Sign & Symptoms of 10 patients of Hemiplegia in Group A.**

Sign Symptoms	B.T.	A.T.	D	% Relief	S.D.±	SE±	t	P
Finger movement	2.8	1.5	1.3	52.00	0.95	0.30	4.33	<0.01
Lifting arm & leg	3.1	1.6	1.5	48.39	0.97	0.31	4.84	<0.001
Standing from sitting	1.67	0.78	0.89	53.33	0.60	0.2	4.45	<0.01
Loss of speech	2.2	1.6	0.6	27.27	0.70	0.22	2.72	<0.05
Loss of sensation	2.7	1.3	1.4	51.85	1.07	0.34	4.12	<0.01
Ruja (Pain)	2.7	0.4	2.3	85.19	0.82	0.26	8.83	<0.001
Gourav	2.8	1.1	1.7	60.7	0.677	0.21	7.96	<0.001
Shohta	3.1	0.1	2.1	67.74	0.32	0.1	21	<0.001
Muscle tone	3.2	1.5	1.7	53.13	1.21	0.38	4.47	<0.01
Muscle power	3.7	1.4	2.3	62.16	0.82	0.26	8.83	<0.001
Reflexes	1.13	0.8	3.33	29.20	0.19	0.13	2.54	<0.05
Walking time	3.1	0.8	2.3	74.19	0.68	0.21	10.78	<0.001
Hand grip	3.3	1.2	2.1	63.63	1.29	0.41	5.12	<0.001
Foot pressure	2.5	1.1	1.4	56.00	1.17	0.37	3.78	<0.01
Associated symptom	3.2	1.5	1.7	53.13	1.21	0.38	4.47	<0.01

Table2: Total Effect Cardinal Sign & Symptoms of 10 patients of Hemiplegia in Group B.

Sign Symptoms	B.T.	A.T.	D	% Relief	S.D.±	SE±	t	P
Finger movement	2.3	0.9	1.4	60.87	0.52	0.16	8.57	<0.001
Lifting arm & leg	2.3	0.9	1.4	60.87	0.52	0.16	8.57	<0.001
Standing from sitting	2.2	0.7	1.5	68.18	0.70	0.22	6.71	<0.001
Loss of speech	2.5	1.1	1.4	56.00	1.17	0.37	3.78	<0.01
Loss of sensation	2.8	1.2	0.2	62.5	0.667	0.211	9.487	<0.001
Ruja (Pain)	2.4	0.1	2.3	95.85	0.48	0.15	15.06	<0.001
Gourav	2.3	0.6	1.7	73.91	0.48	0.15	11.13	<0.001
Shohta	0.2	0.4	1.6	80.00	0.966	0.31	5.4	<0.001
Muscle tone	3.7	0.8	2.9	78.38	1.10	0.35	8.33	<0.001
Muscle power	3.1	0.8	2.3	74.19	0.67	0.21	10.78	<0.001
Reflexes	2.67	1.3	1.37	50.00	0.87	0.29	4.48	<0.001
Walking time	3.4	0.4	3	88.25	0.67	0.21	14.23	<0.001
Hand grip	2.9	0.8	2.1	72.41	0.73	0.23	0.9	<0.001
Foot pressure	2.2	0.7	1.5	68.18	0.70	0.22	6.70	<0.001
Associated symptom	3.3	0.9	2.4	72.72	0.97	0.31	7.74	<0.001

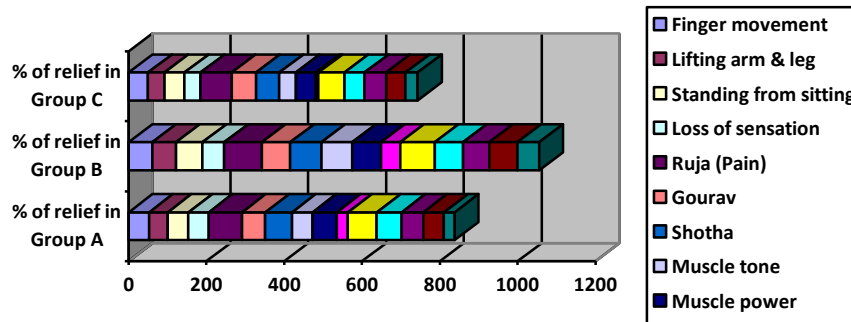
Table3: Total Effect Cardinal Sign & Symptoms of 10 patients of Hemiplegia in Group C.

Sign Symptoms	B.T.	A.T.	D	% Relief	S.D.±	SE±	t	P
Finger movement	0.3	1.5	1.5	50.00	0.71	0.22	6.8	<0.001
Lifting arm & leg	2.4	1.4	1.1	41.67	0.82	0.26	3.85	<0.01
Standing from sitting	2.7	1.3	1.4	51.85	1.07	0.34	4.12	<0.01
Loss of speech	2.2	1.5	0.7	31.81	1.25	0.40	1.77	>0.05
Loss of sensation	2.4	1.4	0.1	41.67	0.82	0.26	3.85	<0.01
Gourav	3.7	1.34	2.3	62.7	0.671	0.213	7.96	<0.001
Shohta	3.2	1.3	1.9	59.38	0.74	0.233	8.14	<0.001
Muscle tone	2.38	1.38	0.1	42.10	0.76	0.27	3.70	<0.01
Muscle power	2.7	1.3	1.4	51.85	1.07	0.34	4.12	<0.01
Reflexes	1.93	1.8	0.13	6.74	0.35	0.09	1.44	>0.1
Walking time	1.8	0.6	1.2	66.66	0.79	0.45	4.81	<0.001
Hand grip	2.8	1.5	1.3	52.00	0.95	0.30	4.33	<0.01
Foot pressure	2.9	1.3	1.6	55.17	1.67	0.52	3.08	<0.02
Ruja (Pain)	0.2	0.4	1.6	80.00	0.97	0.31	5.24	<0.001
Associated symptom	3.25	1.63	1.62	50.00	0.92	0.32	5.08	<0.01

Table4: Percentage of relief in cardinal signs & symptoms of Hemiplegia in all three Groups.

Symptoms	% of relief in Group A	% of relief in Group B	% of relief in Group C	Total %
Finger movement	52.00	60.87	50.00	54.29

Lifting arm & leg	48.39	60.9	41.67	50.32
Standing from sitting	53.33	68.18	51.85	57.78
Loss of sensation	51.85	56.00	41.67	49.84
Ruja (Pain)	85.19	95.85	80.00	87.01
Gourav	60.70	73.91	62.7	65.77
Shohta	67.74	80.00	59.38	69.04
Muscle tone	53.13	78.38	42.10	57.87
Muscle power	62.16	74.19	51.85	62.73
Reflexes	29.20	50.0	6.74	28.64
Walking time	74.19	88.25	66.66	76.36
Hand grip	63.63	72.41	52.00	2.68
Foot pressure	56.00	68.18	55.17	59.78
Associated symptom	53.13	72.72	50.00	58.61
Loss of speech	27.27	56.00	31.81	38.36



Figures 1: Percentage of relief in cardinal signs & symptoms of Hemiplegia in all three Groups

Table 5: show t value and P value of the Symptoms after one month clinical trial (if P value < 0.20 to > 0.05 = insignificant, if P value ≤ 0.05 to > 0.01 = significant, if P value ≤ 0.01 to < 0.001 = highly significant)

Symptoms	% of relief in Group A	GROUP A			% of relief in Group B	GROUP B			% of relief in Group C	GROUP C		
		t	P	Results		t	P	Results		t	P	Results
Finger movement	52.00	4.33	<0.01	S	60.87	8.57	<0.001	H.S	50.00	6.8	<0.001	I.S
Lifting arm & leg	48.39	4.84	<0.001	H.S	60.9	8.57	<0.001	H.S	41.67	3.85	<0.01	S
Standing from sitting	53.33	4.45	<0.01	S	68.18	6.71	<0.001	H.S	51.85	4.12	<0.01	S
Loss of sensation	51.85	2.72	<0.05	S	56.00	3.78	<0.01	S	41.67	1.77	<0.05	S
Ruja (Pain)	85.19	4.12	<0.01	S	95.85	9.487	<0.001	H.S	80.00	3.85	<0.01	S
Gourava	60.70	8.83	<0.001	H.S	73.91	15.06	<0.001	H.S	62.7	7.96	<0.001	H.S
Shohta	67.74	7.96	<0.001	H.S	80.00	11.13	<0.001	H.S	59.38	8.14	<0.001	H.S
Muscle tone	53.13	21	<0.001	H.S	78.38	5.4	<0.001	H.S	42.10	3.70	<0.01	H.S
Muscle power	62.16	4.47	<0.01	S	74.19	8.33	<0.001	H.S	51.85	4.12	<0.01	S
Reflexes	29.20	8.83	<0.001	H.S	50.0	10.78	<0.001	H.S	6.74	1.44	>0.1	I.S
Walking time	74.19	2.54	<0.05	S	88.25	4.48	<0.001	H.S	66.66	4.81	<0.001	H.S
Hand grip	63.63	10.78	<0.001	H.S	72.41	14.23	<0.001	H.S	52.00	4.33	<0.01	S
Foot pressure	56.00	5.12	<0.001	H.S	68.18	09	<0.001	H.S	55.17	3.08	<0.02	S
Associated symptom	53.13	3.78	<0.01	S	72.72	6.70	<0.001	H.S	50.00	5.24	<0.001	H.S
Loss of speech	27.27	4.47	<0.01	S	56.00	7.74	<0.001	H.S	31.81	5.08	<0.01	S

Table 5: Total effect of therapy on laboratory parameters of 10 patients of Group A

Parameters	B.T.	A.T.	D	% Relief	S.D.±	SE±	t value	p
Hb%	13.45	13.7	-0.25	1.86↑	13.18	0.42	-0.6	>0.10
TLC	8040	7730	2310	3.86	769.5	243.33	1.274	>0.10
ESR	10.3	11	-0.7	6.796	5.677	1.795	-0.389	>0.10
S.Cho.	197.1	188	9.1	4.6169	13.543	4.282	2.1247	>0.05
F.B.S.	93	91.7	1.3	1.3978	9.393	2.970	0.4377	>0.10

In Group A

Hb% was increased by 1.86% that was statistically insignificant (p > 0.10)

TLC was decreased in Group A 3.86% change was seen in readings, that was statically insignificant.

E.S.R. was increased in Group A 3.86% change was seen in readings, that was statically insignificant.

S.Cholesterol. was decreased by 4.61% Group A that was also insignificant

F.B.S. was found to be decreased by 1.39% in Group A that was also insignificant statistically.

Table6: Total Effect of therapy on laboratory parameters of 10 patients in Group B.

Parameters	B.T.	A.T.	D	% Relief	S.D.±	SE±	t value	p
Hb%	13.3	13.95	-0.65	4.88↑	1.415	0.447	-1.452	>0.10
TLC	7420	7860	-440	5.92↑	840.89	265.91	-1.654	>0.10
ESR	11.2	10.9	0.3	2.67↑	6.037	1.909	-0.157	>0.10
S.Cholesterol.	189.8	199.7	-2.9	1.5279↑	16.76	5.299	-0.547	>0.10
F.B.S.	102.8	90.5	13.5	13.035	26.442	8.3615	1.603	>0.10

In Group B

Hb% was increased by 4.88% in group B that was insignificant.

TLC was increased by 5.92% in Group B that was insignificant.

E.S.R. was decreased by 2.68% Group B that was insignificant.

S.Cholesterol. was increased by 1.527% in Group B that was statistically insignificant.

F.B.S. was decreased by 13.03% in Group B that was statistically insignificant.

Table7: Total Effect on laboratory parameters of 10 patients in Group C.

Parameters	B.T.	A.T.	D	% Relief	S.D.±	SE±	t value	p
Hb%	13.65	14.4	-0.85	6.2271↑	1.415	0.448	-1.899	>0.05
TLC	8230	8040	190	2.307	1189.26	376.07	0.505	>0.10
ESR	13.6	12.7	0.9	6.6176	5.971	1.88	0.476	>0.10
S.Cholesterol.	198.9	188.6	10.3	5.1784	11.035	3.489	2.9514	>0.02
F.B.S.	97.1	94.1	03	3.0895	08	2.529	1.1858	>0.10

In Group C

Hb% was increased by 6.22% in Group C that was statically insignificant.

TLC was decreased by 2.31% in Group C that was insignificant.

E.S.R. was decreased by 6.62%, S.Cholesterol. was decreased 5.18%, F.B.S. was decreased by 3.08% in Group C that all are statistically insignificant.

CONCLUSION

Table8: Total Effect of therapy of 30 patients of Hemiplegia

Total Effect	Group A		Group B		Group C		Total	%
	No. of Pt.	%	No. of Pt.	%	No. of Pt.	%		
Complete cure	00	00	01	10	00	00	1	3.33
Marked improvement	04	40	05	50	03	30	12	40
Moderate improvement	06	60	04	40	05	50	15	50
Mild Improvement	00	00	00	00	02	20	2	6.66
Unchanged	00	00	00	00	00	00	00	00

Complete remission was found in 10% in Group B only. As a whole of 30 patients studied, complete remission was found in 3.33% in Group B. As a whole of 30 patients studied complete cure was found in 3.33%. Marked improvement was obtained in 40% in Group A, 50% patients of Group B, 30% patients of Group C. As a whole of 30 patients studied marked improvement was found in 40%. Moderate improvement was obtained in 60% in Group A, 40% patients of Group B 50% patients of Group C. As a whole of 30 patients studied moderate improvement was found in 50%. Mild improvement was found in 20% in Group C only. As whole of 30 pt. studied mild improvement was found 6.66%. No patient remained unchanged by this therapy.

REFERENCES

- Robinson RG, Bolduc PL, Price TR. Two-year longitudinal study of post stroke mood disorders: diagnosis and outcome at one and two years. *Stroke*. 1987; 18:837- 834.
- Parikh RJ, Lipsey JR, Robinson RG, Price TR. Two-year longitudinal study of post stroke mood disorders: dynamic changes in correlates of depression at one and two years. *Stroke*. 1987; 18:579 -584.
- Starkstein SE, Robinson RG. Affective disorders and cerebral vascular disease. *Br J Psychiatry*. 1989; 154:170 -182.
- Robinson RG, Starkstein SE. Current research in affective disorders following stroke. *J Neuropsychiatry Clin Neurosci*. 1990; 2:1-14.
- Robinson RG, Morris PL, Fedoroff JP. Depression and cerebro-vascular disease. *J Clin Psychiatry*. 1990; 51:26 -31.
- Astrom M, Adolfsson R, Asplund K. Major depression in stroke patients: a 3-Year longitudinal study. *Stroke*. 1993; 24: 976 -982.
- Andersen G, Vestergaard K, Riis JO, Lauritzen L. Incidence of post-stroke depression during the first year in a large unselected stroke population determined using a valid standardized rating scale. *Acta Psychiatr Scand*. 1994; 90:190 -195.
- Sharpe M, Hawton K, Seagroatt V, Bamford J, House A, Molyneux A, Sandercock P, Warlow C. Depressive disorders in long-term survivors of stroke: association with demographic and social factors, functional status and brain lesion volume. *Br J Psychiatry*. 1994; 164:380 -386.
- Robinson RG, Starr LB, Kubos KL, Price TR. A 2 year longitudinal study of post- stroke mood disorder: findings during the initial examination. *Stroke* 1983; 14:736-41.
- Wade DT, Smith JL, Hewer JL. Depression after stroke: a community study of its frequency. *Br J Psychiatry* (in press).
- Feibel JH, Berk S, Joynt RJ. The unmet needs of stroke survivors. *Neurology* 1979; 29:592.
- Feibel JH, Springer CJ. Depression and failure to resume physical activities after stroke. *Arch Phys Med Rehabil* 1982; 63:276-8.
- Robinson RG, Price TR. Post-stroke depressive disorders: a follow-up study of 103 patients. *Stroke* 1982; 13:635-40.
- Ahlsio B, Britton M, Murray V, Theorell T. Disablement and quality of life after stroke. *Stroke* 1984; 15:886-90.
- Murphy E. Social origins of depression in old age. *Br J Psychiatry* 1982; 141:135-42.
- Gurland BJ, Copeland J. The mind and mood of aging. New York: Croom Helm, 1983.
- Acharya YT, Narayan Ram Acharya Kavya Tirtha. (ed). *Susruta samhita with Nibanda Sangraha commentary of Sri*

- Dalhanacharya, 6th ed. Varanasi: Chaukambha orientalia; 1997. P.144.
18. Acharya Y T. (ed). Charakasamhita of Agnivesha with Ayurveda Deepika commentary of Chakrapanidatta.2011 reprint ed. Varanasi: Chaukamba Orientalia; 2011. p.79/80.
 19. Acharya Y T. (ed). Charakasamhita of Agnivesha with Ayurveda Deepika commentary of Chakrapanidatta.2011 reprint ed. Varanasi: Chaukamba Orientalia; 2011. p.79/80.
 20. Sri Rajeshwara data shastry ayurvedashastra acharya. (ed). Bhaishajyaratnavali of Bhisagratna Shri Brahmashankaramishra revised by Govindadas with Vidyothini hindi commentary of Kaviraj Sri Ambikadattashastry, 13th ed. Varanasi: Chaukhambha Sanskrit Sansthan; 1999. P.385.
 21. Kaseenath shastry. (ed). Rasatarangini of Pranacharya Sri Sadananda Sharma with Rasavijnana hindi commentary by Ayurvedacharya Sri haridattashastry with Ayurvedacharya Pa. Dharmananda shastry, 11th ed. New Delhi: Motilal Banarasi das; 1979.P.376-377.
 22. Ayurvedacharya Sri Y T Acharya.(ed). Rasaratna Samuchhaya with Vijnana Bhodhini Hindi Commentary by Prof. Dattatreya Ananta Kulkarni, Vol I, Reprint - 1998. New Delhi: Meharchand Lachhamandas Publication; P.97.
 23. Ayurvedacharya Sri Y T Acharya.(ed). Rasaratna Samuchhaya with Vijnana Bhodhini Hindi Commentary by Prof. Dattatreya Ananta Kulkarni, Vol I, Reprint - 1998. New Delhi: Meharchand Lachhamandas Publication; P.18.
 24. Ayurvedacharya Sri Y T Acharya.(ed). Rasaratna Samuchhaya with Vijnana Bhodhini Hindi Commentary by Prof. Dattatreya Ananta Kulkarni, Vol I, Reprint - 1998. New Delhi: Meharchand Lachhamandas Publication; P.120.
 25. Ayurvedacharya Sri Y T Acharya.(ed). Rasaratna Samuchhaya with Vijnana Bhodhini Hindi Commentary by Prof. Dattatreya Ananta Kulkarni, Vol I, Reprint - 1998. New Delhi: Meharchand Lachhamandas Publication; P.74-75.
 26. Kaseenath shastry. (ed). Rasatarangini of Pranacharya Sri Sadananda Sharma with Rasavijnana hindi commentary by Ayurvedacharya Sri haridattashastry with Ayurvedacharya Pa. Dharmananda shastry, 11th ed. New Delhi: Motilal Banarasi das; 1979.P.614-615.
 27. Keelay, L. E.(1897). Opium: its use, abuse and cure. Chicago, IL: The Banner of Gold, Co.[Reprint New York: Arno Press; 1981].
 28. Acharya J T. (ed). Charaka samhita of Agnivesha with Ayurveda Deepika commentary of Chakrapanidatta.5th ed. New Delhi: Munshiram Manoharlal; 1992. P.113.
 29. Acharya J T. (ed). Charaka samhita of Agnivesha with Ayurveda Deepika commentary of Chakrapanidatta.5th ed. New Delhi: Munshiram Manoharlal; 1992. P.77.
 30. Acharya J T. (ed). Charaka samhita of Agnivesha with Ayurveda Deepika commentary of Chakrapanidatta.5th ed. New Delhi: Munshiram Manoharlal; 1992. P.619.
 31. Acharya J T, Narayan Ram Acharya Kavya Tirtha. (ed). Susruta Samhita with Nibandha Sangraha Commentary of Dalhana. 6th ed. Varanasi: Chaukambha orientalia; 1997.P.144.
 32. Acharya J T, Narayan Ram Acharya Kavya Tirtha. (ed). Susruta Samhita with Nibandha Sangraha Commentary of Dalhana. 6th ed. Varanasi: Chaukambha orientalia; 1997.P.266
 33. Acharya J T, Narayan Ram Acharya Kavya Tirtha . (ed). Susruta Samhita with Nibandha Sangraha Commentary of Dalhana. 6th ed. Varanasi: Chaukambha orientalia; 1997.P.427-428.
 34. Bhisagacharya Harisastri Paradakara Vaidya.(ed). Astangahrudayam with commentary by Sarvangasundara of Arunadatta and Ayurvedarasayana of Hemadri, 9th ed. Varanasi: Chaukambha orientalia; 2005.p.530-535.
 35. Bhisagacharya Harisastri Paradakara Vaidya.(ed). Astangahrudayam with commentary by Sarvangasundara of Arunadatta and Ayurvedarasayana of Hemadri, 9th ed. Varanasi: Chaukambha orientalia; 2005.p.725.