INNOVARE JOURNAL OF AYURVEDIC SCIENCES

Vol 1, Issue 2 , 2013 ISSN:2321-6824

Research Article

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

NEERAJ KANUNGO[1], MANOJ KUMAR GUPTA[2], DINESH SINGH GAUR[3], SHRIKRISHNA SHARMA[4], U.S NIGAM[5], VINOD KUMAR SINGH[6]

[1]Lecturer, Department of Kaya chikitsa, Government Ashtang Ayurvedic College and Hospital, Lokmanya Nagar, Indore, Madhyapradesh, India.[2]Lecturer, Department of Roga and Vikriti Vijnana,Government Ashtang Ayurvedic College and Hospital, Lokmanya Nagar, Indore, Madhyapradesh, India.[3]Lecturer, Department of Shalakya, Government Ashtang Ayurvedic College and Hospital, Lokmanya Nagar, Indore, Madhyapradesh, India. [4]Ex Associate Professor Department of Roga and Vikriti Vijnana, National Institute of Ayurveda, Jaipur, Rajasthan, India. [5]Ex Principal and H.O.D. Department of Kaya chikitsa, Government Dhawantari Ayurved College and Hospital, Ujjain, Madhyapradesh, India. [6] Reader. Department of Kaya chikitsa, Gaur Brahman Ayurved College and Hospital, Rohtak, Haryana, India.

Email: drmanoj.gupta505@g mail.com

Received: 8 July 2013, Revised and Accepted:8 August 2013

ABSTRACT

In the present era due to speeder 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.

Losnua Lusgla;qDra i{kk?kkrs fojspue~ AA ¼p-fp- 28@100½

Generally the Vatavyadhi is managed by Snehan-Swedan, Vastikarma etc. But according to Charakachrya Virechankarrna 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 reminant 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.

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	**Score**
Loss of speech (Vaksanga)	
Normal	0
Speak with difficulty	1
Speak few words	2
Utter voice	3
Aphasia	4
Finger movement	
Normal	0
Able to bold object	1
Unable to bold object	2
Slight	3
No	4
Lifting of Arm at shoulder/Leg at Hip joint (Flexion Extension)	
Up to to 180	0
Up to 135	1
Up to 90	2
Up to 45	3
No	4
Standing from sitting	
Normal	0
Without support	1
With support	2
Unable	3
Muscle tone (Rigidity)	
Normal	0
Mild rigidity	1
Moderate rigidity	2
Seven rigidity	3
Loss of Muscle power	
Normal	0
Not against resistance	1
Power detachable when gravity excluded	2
Flicker	3
Complete paralysis	4
Loss of sensation (Achetana)	
Normal	0
Mild sensory loss	1
Moderate sensory loss	2
Sever to total Sensory loss	3
Walking time (cover given distance in time [10 meter])	
Less than 1 min	0
Between 1-1:30 min	1
Between 1:30-2min	2
More than 2min	3
Can't Walk	4
Hand grip power by sphygmomanometer	
Above 40 mm Hg	0
30-40 mm Hg	1
20-30 mmHg	2
10-20 mm Hg	3
0-10 mm Hg	4
Foot pressure on weighing machine	
Above 40 kg	0
30-40 kg	1
20-30 kg	2
10-30 kg	3
0-10 kg	4
Reflexes	
Normal	0
Brisk	1
Very Brisk	2
Clonus	3
Ruja (Pain)	
No pain	0
Only after some extension	1
Less frequently	2
Very frequently	3
Gourava	
Normal	0
Mild Gaurav	1
Moderate Gourav	2
Sever Gourav	3
Sotha	
No Sotha	0
Mild Sotha	1
Moderate Sotha	2
Severe Sotha	3
Associated signs symptoms	
No deviation of face	0
Slightly present	1
Moderately present	2
Markedly present	3

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

Group A-Shodhan Grou

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*, *Akrityush*, *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 morring 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 snighdha 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.& pakshaghatri Guggulu is given after meals.

Group C- Shaman Group

10 patients were registered in the group and all patients completed this course Pakshaghari 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 Hemplegia 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
Ruia (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
Shotha	3.1	01	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 Hemplegia in Group B.

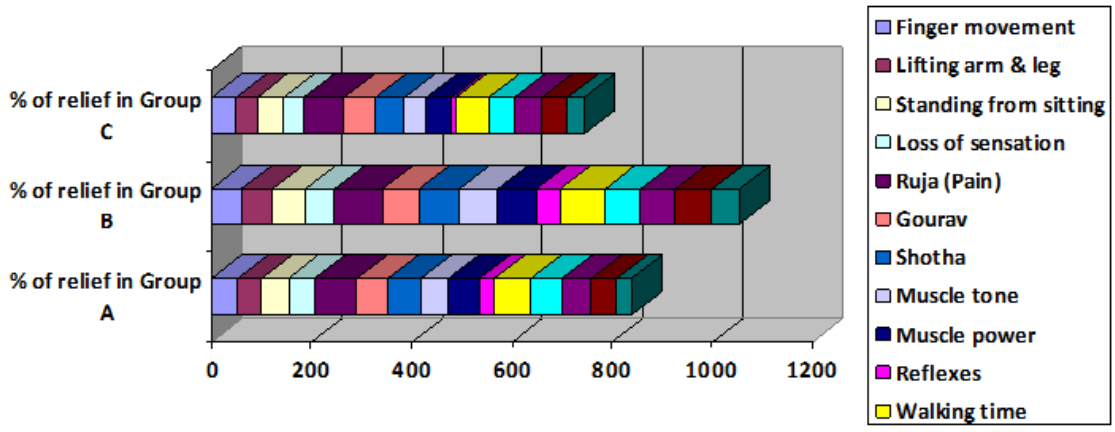
Sign Symptoms	B.T.	A.T.	D	% Relief	S.D.±	SE±	t	P
Finger movement	2.3	0.9	1.4	60.87	0.52	0.16	8.57	<0.001
Lifting arm & leg	2.3	0.9	1.4	60.87	0.52	0.16	8.57	<0.001
Standing from sitting	2.2	0.7	1.5	68.18	0.70	0.22	6.71	<0.001
Loss of speech	2.5	1.1	1.4	56.00	1.17	0.37	3.78	<0.01
Loss of sensation	2.8	1.2	02	62.5	0.667	0.211	9.487	<0.001
Ruia (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
Shotha	02	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	09	<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 Hemplegia in Group C.

Sign Symptoms	B.T.	A.T.	D	% Relief	S.D.±	SE±	t	P
Finger movement	03	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	01	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
Shotha	3.2	1.3	1.9	59.38	0.74	0.233	8.14	<0.001
Muscle tone	2.38	1.38	01	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
Ruia (Pain)	02	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 sings & symptoms of Hemplegia 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
Ruia (Pain)	85.19	95.85	80.00	87.01
Gourav	60.70	73.91	62.7	65.77
Shotha	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



Figures1: Percentage of relief in cardinal sings & symptoms of Hemplegia 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 t	P	Results	% of relief in Group B	GROUP B t	P	Results	% of relief in Group C	GROUP C 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
Shotha	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

Table5: 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 wss 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

1. 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.
2. 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.
3. Starkstein SE, Robinson RG. Affective disorders and cerebral vascular disease. Br J Psychiatry. 1989; 154:170 –182.
4. Robinson RG, Stark stein SE. Current research in affective disorders following stroke. J Neuropsychiatry Clin Neurosci. 1990; 2:1–14.
5. -Robinson RG, Morris PL, Fedoroff JP. Depression and cerebro-vascular disease. J Clin Psychiatry. 1990; 51:26 – 31.
6. Astro m M, Adolfsson R, Asplund K. Major depression in stroke patients: a 3-Year longitudinal study. Stroke. 1993; 24: 976 –982.
7. 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.
8. 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.
9. 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.
10. Wade DT, Smith JL, Hewer JL. Depression after stroke: a community study of its frequency.Br J Psychiatry (in press).

11. Feibel JH, Berk S, joynt RJ. The unmet needs of stroke survivors. Neurology 1979; 29:592.
12. Feibel JH, Springer CJ. Depression and failure to resume physical activities after stroke. Arch Phys Med Rehabil 1982; 63:276-8.
13. -Robinson RG, Price TR. Post-stroke depressive disorders: follow-up study of 103 patients. Stroke 1982; 13:635-40.
14. Ahlsio B, Britton M, Murray V, Theorell T. Disablement and quality of life after stroke. Stroke 1984; 15:886-90.
15. Murphy E. Social origins of depression in old age. BrJ Psychiatry 1982;141:135-42.
16. Gurland BJ, Copeland J. The mind and mood ofaging. New York: Croom Helm, 1983.
17. Acharya YT, Narayan Ram Acharya Kavya Tirtha. (ed). Susruta samhita with Nibanda Sangraha commentary of Sri Dalhanacharya, 6th ed. Varanasi: Chaukambha
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 Bhishagratna 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.