



A CLINICAL STUDY ON KAMPAVATA (PARKINSON'S DISEASE) AND ITS MANAGEMENT WITH KAPIKACCHU AND BASTI

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ABSTRACT Kampavata (Parkinson's disease) is a progressive neurodegenerative disorder associated with insidious onset, usually in second half of life, characterized by slowly progressive akinesia, rigidity, postural abnormality and tremor. Because of its crippling nature and non-available of curative treatment Parkinsonism has remained a great problem in the aging society. In this study to evaluates the role of Kapikacchu (Mucuna Pruriens) powder administered orally and in the form Basti in the management of Kampavata (Parkinson's Disease). After the clinical trial there is sufficient evidence provided that Kapikacchu administered through both the routes i.e. orally and by Basti has definite role in the management of Kampavata.

KEYWORDS : Kampa (tremor), Stambha (rigidity), Chestasanga (bradykinesia)

INTRODUCTION:-

Kampavata (Parkinson's Disease) is a syndrome consisting of variable combination of Kampa (tremor), Stambha (rigidity), Chestasanga (Bradykinesia) and a characteristic disturbance of gait and posture. Kampavata (Parkinson's disease) generally commences in middle or late life and leads to progressive disability with time disease occur in all ethnic group has equally sex distribution.

In Charaka Samhita Vepathu has been described as one of the eight types of Nanatmaja disorder of Vata and Kampa has been mentioned as one of Vikara of Vata. Basavarajiyam has described a clinical entity known as Kampavata which resembles with the description of Parkinson's diseases. Because of its crippling nature and non-availability of curative treatment this disease has remained a great problem in ageing society.

Though in modern medical science a lot of research work has been done still no definite radical therapy is available. However some drug like L-dopa, Carbidopa etc. Are being used in routine practice to subside the symptom temporarily levodopa the choice of drug for Parkinsonism when taken as oral mono therapy leads to number of unpleasant and occasionally even intolerable side effects.

In recently studies L-dopa has isolated from Kapikacchu but still its role in the management of Kampavata (Parkinson's Disease) has not been decided to our view due to its additional Vrishya and Rasayana property it may prove a good remedy for Kampavata (Parkinson's Disease) as it occurs so this drug was selected for clinical study to evaluate its role in the management of Kampavata.

Aim:-

to evaluates the role of Kapikacchu (Mucuna Pruriens) powder administered orally and in the form Basti in the management of Kampavata (Parkinson's Disease) and to see the whether oral or Basti route of the drug administration is better for the treatment of Kampavata.

METHODOLOGY:-

20 patient presenting with signs and symptoms of Kampavata (Parkinson's disease) were selected. Following test carried out assess the initial condition of patient as for require

Haematology: - Hb, TC, DC, ESR, RBCs, Urine examination, Biochemical investigations: - Sr. Creatinine, BSL, Blood Urea, Serum Cholesterol and Thyroid Function Test

PLAN OF STUDY:

The selected patients were random in the following separate group.

(1) KAPIKACCHU GROUP:-

Kapikacchu Churna in powder form were be administered on the dose of 6 gm thrice a day with water for 45 days.

(2) BASTI GROUP:-

The Asthapana basti prepared from the Kwatha and Kalka and Kapikacchu by adding other conventional ingredients like Taila, Madhu, Saindhava were be given as Karma Basti schedule. Bala Taila were be used for Anuvasana Basti as well as for adding in Niruha Basti.

18 Anuvasana Basti and 12 Asthapana Basti were be administration

CRITERIA OF DIAGNOSIS:-

Patients were diagnosed on the basis of sign and symptom of Kampavata available in Ayurveda as well as modern medicine. A special proforma was prepared certain clinical tests evolved for the assessment as usually for the confirmation of diagnostic of Kampavata (Parkinson's disease) were also concludes following diagnostic criteria was employed:-

- (1) Chestasanga (akinesia and bradykinesia): - slowness and poverty of movements.
- (2) Kampa (resting tremor): - at least in one limb.
- (3) Stambha (rigidity): - In any group of muscles in extremities.
- (4) Avanamana (postural changes):-Which includes signs like Rombergism.
- (5) Gatisanga: - Slow, shuffling and short stepped gait (Marché a petits pas) with propulsion and retropulsions.
- (6) Vakvikriti: - Ekshruti (monotony) and Kala (low) speech.

CRITERIA OF ASSESSMENT:-

Efficacy Score System used for the Sign & Symptoms, Dosha, Dushya and General symptom of Kampavata. Severity Index were 1) Absent: - 0, 2) Mild: -1+, 3) Moderate:- 2++ 4) Severe:- 3+++

CHESTAHANI (INDICES TO ASSESS AKINESIA AND BRADYKINESIA):-

Applying the following tests to assessed effect of therapy on Chestahani (bradykinesia).

- 1) Picking of Pins with hands,
- 2) Buttoning time
- 3) Marie sign (Blink rate per minute)
- 4) Rapid alternating movements (Score),
- 5) Chest expansion and
- 6) Walking time

Normal movement was given score -0, Slowness -1, and inactivity or extreme slowness as-2.

FUNCTIONAL ASSESSMENT TESTS:-

Hand Grip Power test and Foot Pressure test were applied for to assessed the Functional capacity.

EXAMINATION OF SMIRITI (MEMORY):-

Short term memory and Long term memory test was carried out before and after treatment. Good -0, Mild-1, Moderate- 2, and Poor- 3 response was noted scored.

STAGING :-

International staging system of Hoehn and Yahr (1967) was adopted.

OBSERVATION

Age wise distribution of 20 Patients of Kampavata

Age Group	No. of Patients in Group of			%
	A Group	B Group	Total	
41-50	3	1	4	20.00

51-60	5	1	6	30.00
61-70	3	5	8	40.00
71-80	2	0	2	10.00

Signs a symptoms found in 20 Patients of Kampavata

Symptoms	No. of Patients in Group of			%
	A Group	B Group	Total	
Kampa	13	7	20	100.00
Chestahani	11	7	18	90.00
Stambha	9	7	16	80.00
Gati vikriti	10	7	17	85.00
Vak vikriti	10	5	15	75.00
Smritihani	11	5	16	80.00
Vishada (Depression)	12	7	19	95.00
Expression less face	6	5	11	55.00

Sign observed in 20 Patients of Kampavata

Sign	No. of Patients in Group of			%
	A Group	B Group	Total	
Pill Rolling	10	10	20	100.00
Marie sign	11	7	18	90.00
Micrographia	11	6	17	85.00
Rombergism	10	7	17	85.00
Finger to Nose	11	7	18	90.00
Slowness of eye movement	5	6	11	55.00
Glabellar tap	9	6	15	75.00
Meyerson's sign	8	7	15	75.00
Stellwag's sign	4	2	6	30.00
Drooling	1	2	3	15.00
Kinesis paradoxa	1	1	2	10.00

Main symptoms found in 20 Patients of Kampavata

Symptoms	No. of Patients in Group of			%
	A Group	B Group	Total	
Kampa	13	7	20	100.00
Chestahani	11	7	18	90.00
Stambha	9	7	16	80.00
Gati vikriti	10	7	17	85.00
Vak vikriti	10	5	15	75.00
Smritihani	11	5	16	80.00
Vishada (Depression)	12	7	19	95.00
Expression less face	6	5	11	55.00

Effect of therapy on symptoms of Kampavata (Oral group)

Symptoms	Mean Score		Relief %	S.D. (+/-)	S.E. (+/-)	t	P
	B.T	A.T					
Kampa	1.63	0.75	53.99	0.35	0.125	7.00	<0.001
Stambha	2.00	1.53	25.00	0.58	0.29	1.73	>0.10
Gativikriti	1.85	1.00	42.5	0.38	0.4	6.00	<0.001
Vakvikriti	1.29	0.57	55.81	0.49	0.18	3.87	<0.01
Smriti	0.63	1.38	54.34	0.46	0.16	4.58	<0.001
Vishadha (Depression)	2.00	1.13	43.5	0.35	0.13	7.00	<0.001

Effect of therapy on Signs of Kampavata (Oral group)

Sign	Mean Score		Relief %	S.D. (+/-)	S.E. (+/-)	t	P
	B.T	A.T					
Pill Rolling	2.00	0.87	56.25	0.35	0.12	9.00	<0.001
Micrographia	2.00	1.14	43.00	0.38	0.14	6.00	<0.001
Rombergism	2.00	1.25	37.5	0.46	0.16	4.58	<0.01
Finger to Nose	2.00	1.5	25.00	0.53	0.19	2.64	0.05
Glabellar tap	2.00	1.4	30.00	0.55	0.24	2.44	<0.01
Impairment of upward gaze	2.00	1.4	30.00	0.83	0.37	2.13	<0.01

Effect of therapy on symptoms of Kampavata (Basti group)

Symptoms	Mean Score		Relief %	S.D. (+/-)	S.E. (+/-)	t	P
	B.T	A.T					
Kampa	3.14	2.28	27.39	0.53	0.20	2.83	<0.02
Stambha	1.85	1.00	46.33	0.69	0.26	3.29	<0.02
Gativikriti	2.71	1.57	42.07	0.38	0.14	8.00	<0.001
Vakvikriti	2.67	1.5	43.82	0.82	0.33	2.00	<0.10
Smriti	1.5	2.0	33.33	0.58	0.29	1.73	>0.105
Vishadha (Depression)	2.00	1.14	43.00	0.38	0.14	6.00	<0.001

Effect of therapy on Signs of Kampavata (Basti group)

Sign	Mean Score		Relief %	S.D. (+/-)	S.E. (+/-)	t	P
	B.T	A.T					
Pill Rolling	2.00	1.42	29.00	0.53	0.20	2.83	<0.05
Micrographia	2.00	1.50	25.00	0.53	0.22	2.24	>0.05
Rombergism	2.00	1.28	36.00	0.49	0.18	3.87	<0.01
Finger to Nose	2.00	1.50	25.00	0.55	0.22	2.23	>0.05
Glabellar tap	2.00	1.66	17.00	0.52	0.21	1.50	>0.05
Impairment of upward gaze	2.00	1.50	25.00	0.50	0.25	3.00	<0.05

DISCUSSION AND CONCLUSION:-

Comparisons of the result of both the group showed that the improvement provided by oral group was better in the symptoms like Kampa, Vakvikriti, Smriti, Gurugatrata and in the sign of Pill Rolling, Micrographia, Glabellar Tap and impairment of Upward gaze in comparison to Basti group.

On other hand Basti group provided comparatively better improvement in the symptoms like Stambha, Vibandha , Angamarda and Katishula in the clinical test of Chestasanga like Buttoning time , Rapid alternating movement, Marie Sign Walking Time, Pricking Pins and Chest expansion. No significantly value changed found in Hematology and bio-chemical investigation in both groups which was statically insignificant.

OVERALL EFFECT OF THERAPIES:-

Kapikacchu administered in oral group provided marked improvement in 50.00% patient where as in Kapikacchu Basti marked improvement was noted in 28.57% of the patients. Similarly 37.50% of the patient were improved with Kapikacchu administered orally group in other hand Kapikacchu Basti group provided improvement to 57.145 of the patients. But remaining 12.5% of the patient remained stable in Kapikacchu administered orally group and in Kapikacchu Basti group 14.28% of the patient remain stable.

Thus there is sufficient evidence provided by this study that Kapikacchu administered through both the routes i.e. orally and by Basti has definite role in the management of Kampavata.

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