

EFFECT OF BRIHANMASHADI TAIL MATRA BASTI AND KAPIKACCHU BEEJA CHURNA IN KAMPVATA (PARKINSON'S DISEASE)

Snehal S. Sherikar

M.D. Scholar Kayachikitsa Department

Y.M.T. Ayurvedic Medical College ,Kharghar, Navi Mumbai, India.

ABSTRACT

Background:-*Kampavata* which is one of the *vataj nanatmaj vyadhi* , resembles Parkinson's disease is a type of movement disorder .It happens when nerve cell in the brain don't produce enough of a brain chemical called dopamine .Parkinson's disease is second most common neurodegenerative disease .It is estimated that approximately 1 million persons in United States & 5 million persons in the world suffer from his disease .Usually affects after the age of 50 years

Aim :- To evaluate the effect of Kapikacchu beeja churna and Brihanmashadi Tail matra basti in Kampavata(Parkinson's disease) basti - **Material & Method-**17 patients of *Kampavata* (Parkinson's disease) were followed selected and administered *sarvanga snehan*, Sarvang swedan followed by *Brihanmashadi matra basti* with orally *Kapikkachhua beej churna* every day for 14 days.**Result:-**Completion of treatment 8(47 %) patients got marked relief , 6(35%) patients got moderate relief and 3(17.6%) patients got mild effect.

From the present study can be concluded that *Kampavata* can be managed with above treatment.

Key Words- *Brihanmashadi matra*, *Kampavata*, *Kapikacchu churna*, , Parkinson's Disease basti

INTRODUCTION

Kampavata is slowly progressive disease of adult life and is one of the most prevalent neurological disorder .In *Charak Samhita Vepathu* has been described as one of the eighty type of *nanatmaja vyadhi* of *vata*. Direct reference to the Parkinson's disease in Ayurvedic symptoms of *Kampavata* such as *karapadtal kampa* (tremors in hands & legs) ,*Dehabhraman* (postural instability),*Matiksheen*(Dementia) and *Nidrabhagna* (Insomnia) simulate to Parkinsons disease.

There are many *vatavyadhis* commonly seen but *Kampavata* is one of the rare mentioned under *vatavyadhis* because of its crippling nature and non availability of curative

treatment .This disease has remained a great problem in aging society which usually affects after the age of 50 years .

The disease is increasing in its frequency with world population showing an incidence of 1-2 per 1000 population and has equal sex distribution.

In Parkinson's disease the basic pathologic changes is degeneration of a group of nerve cells deep within the centre of brain in an area called substantia nigra .This cells use Dopamine as their neurotransmitter to signal other nerve cells .As these cells degenerate & stop functioning ,Dopamine fails to reach the areas of brain that affect motor functions.

No satisfactory treatment is seen in contemporary system of medicine for Parkinson's disease, In this therapy *kapikachhu beej* contains Levodopa which is indicated in Parkinson's disease and *Basti chikitsa* is useful in all *Vatavyadhis*.

MATERIALS AND METHODS:

Source of Data:

17 patients diagnosed as *Kampavata* (Parkinson's disease) were selected from outpatient department; in patient department at Y.M.T.Ayurvedic Medical College, Kharghar, Navi Mumbai.

Inclusion Criteria :

1. Patients with clinical signs and symptoms of *Kampavata* (Parkinson's disease)
2. Patients with either sex
3. Patients above 40 yrs of age

Exclusion Criteria :

Patients with other systemic disorder which interfere with treatment will be excluded such as

1. Diffuse Lewy body disease
2. Jacobs disease
3. Striatonigral degeneration
4. Wilson's disease
5. Huntigton's disease (Chorea)
6. Alzheimer's disease
7. Drug induced
8. Trauma
9. Cardio embolic stroke.

Diagnostic Criteria:

Diagnosis was made based on clinical symptoms of *Kampavata* (Parkinson's disease) i.e. Tremor-*Kampa*

Rigidity-*Stamba*

Bradykinesia-*Chestsanga*

Gait abnormalities-*Gatisanga*

Postural abnormalities- *Avanaman*

Selection of drug-Brihanmashadi tail (Ref- Vangasena Vatavyadhi adhikar)

Contents-

1. *Mash Kwath*
2. *Bala Kwath*
3. *Dashmula Kwath*

4. *Yava*
5. *Kulatha*
6. *Chaga mamsa rasa*
7. *Tila Tail-1 prastha*
8. *Dugdha- 4 prastha*
9. *Kalka Dravya – Atmagupta (Kraunch), Saindhav, Shatavha, Erand, Musta, Jeevaniya aushadhi, Bala, Trikatu. -1 tola*

Drug authentication has been done from *Dravyguna* department and preparation of drug from *Rasashastra- Bhaisajya kalpana* department from Y.M.T.Ayurvedic college, Kharghar.

Method of Therapy

1 *Kapikachhu beej churna* 6 gm twice daily with lukewarm water for 14 days

2 *Sarvanga snehan*.

3 *Sarvanga sweda*.

4 *Brihan masha tail matra basti* for 14 days

Previous any medicines for Parkinson's disease has been discontinued 1 week before treatment.

Study Duration- 14 days

Follow up –After 7 days

Assessment Criteria :

To assess the efficacy of treatment, the symptoms of *Kampavata* (Parkinson's Disease) such as tremor, bradykinesia, rigidity etc were noted carefully before the commencement of treatment (1st day), during (7th) and after treatment (14th day).

United Parkinson's Disease rating scale was applied to measure the degree of improvement.

Tremor

T0- Absent

T1- Slight and infrequent, not bothersome to patient

T2- Moderate, bothersome to patient

T3- Severe, interferes with many activities

T4- Marked, interferes with all activities.

Rigidity

R0- Absent

R1- Slight or only with activation

R2- Mild / Moderate

R3- Marked, full range of motion

R4- Severe.

Bradykinesia

B0 – None

B1 – Minimal slowness, could be normal, deliberate

B2 – Mild slowness, poverty of movement

B3 - Moderate slowness, poverty or small amplitude

B4 – Marked slowness, poverty or amplitude.

Gait

G0 – Normal

G1- Walks slowly may shuffle short steps no festination or propulsion

G2 – Walks with difficulty little or no assistance

G3 – Severe disturbance, frequent assistance

G4 – Cannot walk .

Posture

P0 – Normal erect

P1 – Slightly stooped, could be normal for older person

P2 – Definitely abnormal, moderately stooped, may lean to one side

P3 – Severely stooped with Kyphosis

P4 – Marked flexion with extreme abnormality of posture.

Observation & Result:-

It was observed that out of 17 patients 13 patients (76 %) were male & 4 patients (34%) were female. The maximum number of patients 12(75 %) were in age group of 51 to 60 years & 5 (25 %) patients were in age group of 41- 50 years. Majority of patient about 10(58%) belongs to >6 months chronicity & 7 patients(42%) belongs to 3- 6 months chronicity.

Table 1: Observation on results of Tremor(*kampa*), Rigidity(*stambha*), Bradykinesia(*chest asan-ga*), Gait(*Gatisanga*), Posture(*Avmanan*).

Tremor	T0	T1	T2	T3	T4	Total
Before Treatment	-	-	10	6	1	17
During Treatment	-	1	9	6	1	17
After Treatment	-	10	4	2	1	17 'p' value 0.001
Rigidity	R0	R1	R2	R3	R4	Total
Before Treatment	2	7	5	3	-	17
During Treatment	9	5	2	1	-	17
After treatment	12	3	2	-	-	17 'p' value < 0.030
Bradykinesia	B0	B1	B2	B3	B4	Total
Before Treatment	-	2	10	3	2	17
During Treatment	-	6	6	3	2	17
After Treatment	-	10	3	2	-	17 'p' value < 0.050
Gait	G0	G1	G2	G3	G4	Total
Before Treatment	-	9	6	2	-	17
During Treatment	-	10	6	1	-	17

After Treatment	1	14	1	1	-	17
						'p' value<0.267
Posture	P0	P1	P2	P3	P4	Total
Before Treatment	1	10	6	-	-	17
During Treatment	1	10	6	-	-	17
After Treatment	1	10	6	-	-	17
						'p' value <1.000

Results were interpreted after statistical analyzing the grading the symptoms mentioned in assessment criteria before ,during & after the treatment in all 17 cases. Tremor(*Kampa*)- *Kampa* was the main presenting symptom in all patients. The treatment shows more highly significant before & after treatment with 'p' value<0.001 .

Rigidity (*Stambah*) – Rigidity i.e. cog wheel rigidity was found in 15 patients .After treatment of *snehan*, *swedan*, *basti* & *Shamanoushadhi* 12 patients got complete relief with 'p' value<0.030 . Bradykinesia (*Chestsanga*) –Bradykinesia was observed in all 17 patients but only 2 patients got complete relief from bradykinesia.The net relief in parameter is moderate.Gait (*Gatisanga*) –Gait disturbance among 17 patients, 2 patient got severe disturbance in walking, 9 patients got shuffle with short steps,6 patients with festination. After treatment only one patient got complete relief & others were shifted to lower grades. Post-ure(*Avamanan*)- There was no improvement in posture significantly.

DISCUSSION :

Particularly in later years of life span, *Apan vayu* accumulates & may become aggravated .When this is combined with a *vata* increasing life style the stage is set for *vata prasar* (overflow) in circulation .Overflow causes *Vyan vayu* to become disturbed within *rasadhathu* .Systemic signs of *vata* disturbance occur, such as dryness of membrane of body. When *vata* relocate(*sthansanshray*) in the tissue of brain, damaging portion of

brainstem causes altered coordination & tremors. *Vata* enters in *Mamsadhathu* causing muscle rigidity& in *Manovaha srotas* causing depression.

Kampavata is considered as one of the disease provoked *vata* due to *dhatukshay* ,oleation through *abhyanga* &*Brihanmashadi tail matra basti* useful in pacifying *vata* &building *ojas* and also plays nourishing action on the nervous system.

Action of *Matra Basti* is possibly by *Anupravarabhav* of *bastidravya* i.e. *sneha* moves easily up to *grahani*, *nabhi*, *katipradesh* &*kukshi*.It spreads all over body to drain out the morbid *dosha* .*Veerya* of *sneha* enters in systemic circulation &may show their action in *Mastishka* may help in arresting disease process

Kappikacchu (Macuna pruriens)contains Levodopamine or L-dopa within its seeds .L-dopa is precursor of dopamine ,the neurotransmitter which is absent or decreased in Parkinson's disease. In addition it contain serotonin ,5 HTP,Nicotine it could potentially have psychedelic effects.

CONCLUSION

- 1) The treatment measure is most beneficial for initial stage of disease.
- 2) The therapy had no effect on stooped posture.
- 3) 8 patients got marked relief, 6 got moderate relief & 3 patients got mild relief.

Thus this treatment proves to be effective in symptomatic relief for *kampavata*.

REFERENCES

1. Vaidyavarashree Basavraj .Basavrajeeyam Shri Govardhan Sharma ,editor .1st ed.Vatavyadhi nidanlakshan-chikitsa chapter.
2. Acharya Vangsens ,Vangasena Samhita ,Vaidya Shankarlalji Jain editor.Vatavyadhi chapter.Mumbai:Khemraj sri Krishnadas Publication 1996 And Bramhashankar Mishra ,Bhaishajya Ratnavali ,Sri Rajeshwar Datta Shastri ,editors .2nd ed.vatavyadhi chapter Varanasi Chowkhamba publication
3. <http://www.ncbi.nlm.nih.gov/pubmed/12815652>
4. Agnivesha Charak Samhita commentary by Chakrapanidatta "Ayurved Dipika"Vaidya Yadavji Trikamji Acharya.editor 5th ed.Kalpanasinddhi chapter .Varanasi Chowkhamba publication.s
5. Dr. JLN Shastri .study of Essential medicinal plants in Ayurveda.Dravyaguna Vidnyan.2nd Kapikacchu chapter Varanasi;Chowkhamba publications.
6. Harrison's Principles of Internal Medicine,18th edition,Neurologic disorder chapter 372 Parkinsons Disease.

CORRESPONDING AUTHOR

Vd Snehal S. Sherikar

M.D. Scholar Kayachikitsa Department

Y.M.T. Ayurvedic Medical College,

Kharghar, Navi Mumbai, India.

Email- snehal.sherikar@gmail.com
