

**TO STUDY EFFECT OF ASHWAGANDHA IN DIABETIC NEUROPATHY**

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**ABSTRACT**

In the modern world Diabetes Mellitus is a common health problem. The busy and stressful life of modern era and physical inactivity plays important role in diabetes mellitus.<sup>1</sup> According to our classic text *Madhumeha* a type of *Vataj Prameha* is mainly associated with *Dhatukshaya* and *ojakshaya*.<sup>2</sup> *Rasayana* drugs nourish all *Dhatus* hence *ojus*.<sup>3</sup> *Ashwagandha* is extensively used in Ayurveda as *Rasayana*.<sup>4</sup> In the present study 20 patients were selected from OPD and IPD of RGGPGAC Ayurvedic Hospital Paprola HP. For clinical study *Ashwagandha Churna* was selected as trial drug which was given for 2 months in a dose of 5gm. twice a day with milk. It was observed that 65% patients were male, 70 % were female from age group of 30-50 years. 60% were non vegetarian and 85% were of middle socioeconomic status. Among results burning sensation of hands and feet showed 85% relief, 95% relief in tingling sensation, and 88% relief in numbness. All the symptoms showed highly significant results. Hence it can be concluded that *Ashwagandha Churna* is very effective in patients of Diabetic Neuropathy.

**Keywords:** Diabetic Neuropathy, *Rasayana*, *Ashwagandha*

## INTRODUCTION

In modern world Diabetes Mellitus has become a major problem. The worldwide prevalence of diabetes mellitus has risen dramatically from 108 million to 422 million in last three decades.<sup>5</sup> India is among top 3 countries in case of diabetic patients. Diabetes mellitus is termed as *Madhumeha* in *Ayurveda*. Under 20 types of *Pramehas* *Madhumeha* is composed of two words *Madhu* (sweet) and *Meha* (excessive urination). It means excessive sweet urination. Etiological factors are 'beeja dushti' responsible for *sahaj Prameha*, *kaphvardhak ahara vihara*, *mansik hetu* alongwith *Dhatu Kshaya*. *Acharya charaka*, *Sushruta* and *Vagbhatta* has described 20 types of *prameha* and *madhumeha* is described under *vataj prameha*. *sushruta* has denoted *madumeha* by the term *kashaudrameha*. *Acharya charaka* has also classified *prameha* according to body constitution as *sthula* and *krish prameha*. In *samprapti* of *madhumeha* there is *vata* and *kapha dosha prakopa* alongwith *dhatukshaya* and *ojakshaya*. symptoms of *madhumeha* includes *mutramadhurya* (sweetness of urine), *pipasadhikya*, *kshudhadhikya*, *aalsya* (lassitude), burning sensation, numbness, and tingling sensation.<sup>6-7</sup> In chronic cases of diabetes mellitus many complications take place like: vascular, renal, ophthalmic, dermatological complications. Neuropathy is one of the commonest complications causing burning sensation, numbness & tingling sensation in hands and feet. Due to neuroprotective, antioxidant and anti-stress, adaptogenic properties of *Ashwagandha*, this *Rasayana*

drug was selected for the treatment of diabetic neuropathy.<sup>8</sup>

## MATERIAL AND METHOD

To find out the effect of *Ashwagandha Churna* on diabetic neuropathy 20 patients were selected from OPD and IPD of RGGPGAC Paprola irrespective of their age sex occupation religion etc. routine blood investigations have been carried out in order to rule out any other pathology.

Inclusion criteria: Patient suffering from diabetic neuropathy

All patients in age group of 20-60 have been selected

Exclusion criteria

Patients not willing for trial

Patients below age 20 and above 60 years

Duration of trial: Total duration of trial was 60 days.

Criteria of assessment: Assessment was done on the basis of various subjective and objective criteria. It was based on cardinal sign and symptoms of disease and their gradation. All sign and symptoms were graded according to severity on the basis of improvement reported by the patients. Assessment was done and scored for statically analysis.

Criteria for diagnosis

1. *Karpadadaha* ( burning sensation of hand and feet)
2. *Karpadasuptata* (numbness of hand and feet)
3. Tingling sensation
4. *Pindli ainthan* (calf tenderness)

## SCORING AND GRADATION PATTERN

### Burning sensation

No burning sensation	G0	Numbness occasionally	G1
Occasional burning sensation of palm and sole	G1	Mild periodic numbness	G2
Intermittent burning sensation throughout body	G2	Continuous numbness	G3
Continuous burning sensation throughout body	G3	<b>Calf tenderness</b>	
		No tenderness	G0
		Mild tenderness (after exertion only)	G1
		Moderate (on light pressure)	G2
		Severe (even on rest)	G3

### Tingling sensation

No Tingling sensation	G0
Intermittent Tingling sensation in upper and lower extremities	G1
Continuous Tingling sensation in upper and lower extremities	G2
Continuous Tingling sensation in whole body	G3

### Numbness

No numbness	G0
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### Observation and results

Among total number of patients 70% patients were of age group in between 36-50 years. 65 % patients were male. 60% patients were non-vegetarian. 80% were belongs to rural area. 85% were belongs to middle class. 15 % patients were smoker. 10% patients were alcoholic and 10% were both Alcoholic & smoker. 50% patients were of *vata kaphaj prakriti*.

Symptoms	MEAN BT	MEAN AT	%RELIEF	SD	SE	t	p
Burning sensation	2.5	0.375	85	0.806	0.201	10.5	0.0001
Tingling sensation	1.375	0.062	95	1.01	0.253	5.1	0.0001
Numbness	1.06	0.125	88	1.34	0.335	2.798	0.014
Calf tenderness	0.312	0	100	0.873	0.218	1.431	0.173

### DISCUSSION:

Neuropathy is one of the commonest complications of *Madhumeha* /Diabetes mellitus. It causes burning sensation, numbness in hand and feet. Due to neuroprotective role of ashwagandha it is beneficial in relieving symptoms like burning sensation & tingling sensation. *Madhumeha* is variety of *vataj prameha*. In *Madhumeha* there is *Vata Prakopa*, *Ashwagandha* also acts as *Vatahara*. In this study mean score of burning sensation before treatment was 2.5 which fell to 0.375 giving a % relief of 85% which was significant statistically with t value 10.5 and p <0.0001. Mean score of Tingling

sensation before treatment was 1.375 which fell to 0.0625 giving a % relief of 95% which was significant statistically with t value 5.1 and p <0.0001. Mean score of burning Numbness before treatment was 1.06 which fell to 0.125 giving a % relief of 88% which was significant statistically with t value 2.798 and p <0.05. Mean score of calf tenderness before treatment was 0.3125 which fell to 0 with t value 1.431 and p <0.5.

### CONCLUSION

In patients of diabetic neuropathy there was marked reduction of symptoms like burning sensation, tingling sensation, numbness and calf tenderness. No unto

wanted effect of therapy was observed during treatment and during follow up period. So it can be concluded that *Ashwagandha* is very effective in management of diabetic neuropathy but to establish this effect further study of longer duration and larger sample is required.

#### REFERENCES:

1. Harrison T.R. Principal of Internal medicine 2001 15<sup>th</sup> edition vol 1-2
2. Pandit Kashinath Pandey and Dr. gorakhnath Chaturvedi Charak Samhita , Chaukhambha Bharti Academy Reprint 1998. Page no. 638-639
3. Sharma Ramkarana and vidya das bhagwan Chraka samhita 2<sup>nd</sup> edition
4. Chaukhambha Sanskrit prakashan 1983, vol. 1-2
5. Sharma PV Dravyaguna Vigyan vol 2 Chaukhambha Publication
6. Harrison T.R. Principal of Internal medicine 2001 15<sup>th</sup> edition vol 1-2
7. Shashtri Ambika Dutt commentary on Shushruta Samhita chaukhmbha Publication 1996
8. Gupta Atridev vidyotani commentary of ashtang hridaya chaukhmbha Sanskrit prakashan 1975
9. Bhattacharya S.K. , Satyam K.S and Ghoshal K.S. anti-oxidant activity of glycowithanolides from withania somnifera. Indian journal exp. Biol; 1997 vol 35 pp 236-239

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