Original Research Paper GREEVA ASTHIGATAVATA (CERVICAL SPONDYLOSIS): TREATMENT WITH **KUBJAPRASARINI TAILA NASYAKARMA** Government Ayurvedic Medical College Mysuru INDIA. Hampamma KAHER'S Shri BMK Ayurveda Mahavidyalaya Belagavi INDIA. Umashankar KS Government Ayurvedic Medical College Mysuru INDIA Rajendra V Government Ayurvedic Medical College Mysuru INDIA KAHER'S Shri BMK Ayurveda Mahavidyalaya Belagavi INDIA Skandhan KP* *Corresponding Author

ABSTRACT Background: Asthigatavata is mentioned in the context of "gatavata" in classical text. It is a shoolapradhana Vatavyadhi characterised by Asthi shosha, Asthi bheda, Asthi shoola, Sandhi shoola, Bedhaasthiparvanam, Mamsabalakshaya, Aswapna and Satata ruk. Introduction: When kupitha Vata dosha affects the Asthi present in Greeva pradesha, causes a series of changes producing symptoms and this clinical entity is named as Greeva Asthigatavata [GA]. The disease GA described in Ayurveda simulates with Cervical Spondylosis [CS] described in western medical textbooks. Materials and Methods: A controlled clinical study was conducted to evaluate the therapeutic efficacy of Kubjaprasarini taila Nasyakarma in the management of GA. Total 50 patients were incidentally selected and randomly assigned into two groups viz., Group A (Control group) and Group B (Test group). Group A was subjected to Greevabasti with Mashabaladitaila and "Vataharakashaya [4th formula] Ghana Vati for oral administration. While group B was subjected to Nasyakarma with Kubjaprasarinitaila along with Greevabasti with Mashabaladitaila and "Vataharakashaya [4th formula] Ghana Vati. Results: The data was collected on 0 day, 8th day and on 15th day i.e. after the completion of intervention. Discussion: Study showed the result of Group B was clinically and statistically highly significant results with respect to reduction of symptoms than Group A. Also the overall assessment showed clinically and statistically highly significant result in both groups with p value 0.000. However, Group B (Chi square value = 72.124) showed statistically better result than Group A (Chi square value = 69.083) with chi square value.

KEYWORDS: Kubjaprasarinitaila, Nasyakarma, Mashabaladitaila, Greevasthigatavata, Greevabasti, Vataharakashaya Ghana Vati

INTRODUCTION

Cervical Spondylosis [CS] is a degenerative condition that is commonly encountered in old age. Changed lifestyle, advancement in professional and social life, improper sitting posture in offices, continuous work in one posture and over exertion, jerking movements during travelling and sports are responsible for CS. It is also prevalent among the young and middle age people.

Conservative and surgical treatment are advised in modern medical science for CS. Patients will be on treatment for longer period of time [Borenstein et al. 2004]. It targets pain relief, using Non steroidalanti inflammatory Drugs [NSAIDS], analgesics and muscle relaxants, which may cause side effects like gastric irritation leading to ulcers, allergic reactions, renal and liver ailments. The treatment, may also cause progressive cord dysfunction and persistent pain. Surgery is indicated when there is failure of conservative treatment for 10-12 weeks and when there is a progressive neurological deficit due to root or cord compressions [Boon et al. 2014; Vernon, Mior 1991].

Ayurveda provides a reliable therapy for CS .The treatment modalities include the upakramas specifically mentioned in the contexts of Vatavaydhi and Asthigatavata. Among which Nasyakarma indicated in Vatajanya Urdhwajatrugatavyadhis [Acharya 2001] with Kubjaprasarni taila [Shastri 2008] and greeva basti, a sthanikasnigdhasweda with Mashabaladi taila [Dasa 2006] does dhatu poshana, vedana sthapana and asthiposhana. Vataharakashaya [4th formula] Ghana Vati is a Vataharakashaya [Nishteswar, Vidyanath 2008] in the form of Ghana vati which reduces Asthisandhi shoola.

The aim of the present study is to evaluate the therapeutic efficacy of Kubjaprasarini taila NasyaKarma in the management of Greeva Asthigatavata [GA].

MATERIALS AND METHODS

Fifty patients of either sex in the age group of 26-60years with

GAwere selected from the Outpatient and Inpatient departments of Government Ayurveda Medical College Hospital and Government Hi-tech Panchakarma Hospital, Mysore.

Prior to the study, patients consent was taken. Details of their occupation was sought. Patients were divided in to two groups of 25 each viz., Group A (Control group) and Group B (Trial group).

Patients with congenital deformity, traumatic injuries, cervical stenosis and myelopathy, ankylosing spondylosis, infections of bone and gross bony deformity, neoplastic conditions of spine were excluded for the study. Patients who were unfit for Nasyakarma were also excluded.

Patients were advised plain X-Ray of Cervical Spine – AP and Lateral views. Their Pain intensity, Personal care, Reading, Sleeping, Lifting, Driving, Concentration, Headache ,Recreation, working ability[Table 1 and 2] were recorded at the time of admission.

Patients were treated as following style those who belong to Group A were advised Greeva basti with Mashabaladi taila [200ml]. Duration of procedure was 1 muhurtha (48minutes) during morning hours for 7 consecutive days. "Vataharakashaya [4th formula] in the form of Ghana Vati", 1500 mg in 3 equally divided doses was adviced with warm water thrice daily after food for 14 consecutive days from the first day of Greeva basti. Patients in Group B were advised to follow greeva basti and Nasyakarma with Kubjaprasarini taila in a dose of 6 bindu {3ml} to each nostrils for 7 consecutive days during morning hours. They were also advised to take Vataharakashaya Ghana Vati with warm water thrice daily after food for 14 consecutive days from the first day of Nasya Karma.

The results were analysed statistically by using, Chi-square test using Service product for statistical solution (SPSS) for windows software.



with gradation of [0	-5]		
Pain Intensity:	Personal care (Washing Dressing etc.)	Reading	
I have no pain at the moment (0)	Can look after myself normally without causing extra pain (0)	Can read with no pain in neck.(0)	
The pain is very mild at the moment (1)	Can look after myself t normally but it causing extra pain (1) Can read wi slight pain in neck.(1)		
The pain is moderate at the moment (2)	It is painful to look afte myself and I am slow and careful (2)	r Can read with moderate pain in neck.(2)	
The pain is fairly severe at the moment (3)	Need some help but manage most of my personal care (3)	Cannot read as much as because of moderate pain in neck.(3)	
The pain is very severe at the moment (4)	Need help every day in most aspects of self- care (4)	at all because of severe pain in neck.(4)	
The pain is the worst imaginable at the moment (5)	Do not get dressed; I wash with difficulty and stay in bed (5)	d all. (5)	
Headache:	Sleeping :	Lifting	
H0 – I have no headaches at all	SL0 – I have no trouble sleeping	Can lift heavy weights without extra pain.(0)	
H1 – I have slight headaches which come infrequently	SL1 – My sleep is slightly disturbed (less than 1 hour sleepless)	Can lift heavy weights but it gives extra pain.(1)	
H2 – I have moderate headaches which come infrequently	SL2 - My sleep is mildly disturbed (1-2 hours sleepless)	Pain prevents from lifting heavy weights of the floor, but can manage if the weights are conveniently positioned.(2)	
H3 – I have moderate headaches which come frequently	SL3 - My sleep is moderately disturbed (2-3 hours sleepless)	Pain prevents from lifting heavy weights, but can manage to lift light to medium weights if they are conveniently positioned.(3)	
H4 – I have severe headaches which come frequently	SL4 - My sleep is greatly disturbed (3-5 hours sleepless)	Can only lift very light weights.(4)	
H5 – I have headaches almost all the time	SL5 - My sleep is completely disturbed (5-7 hours sleepless)	Cannot lift or carry anything at all.(5)	

Table 1.Assessment Criteria: Neck Disability Index [NDI]

(Table 1 Continued)

•	*			
work Driving		Concentration	Recreation	
Can do as	Drive car	Can	Able to engage in	
much work as	without any	concentrate	all creation	
I want to	neck	fully with no	activities with no	
do.(0)	pain.(0)	difficulty.(0)	neck pain at all.(0)	
Can do usual	Drive car	can	Able to engage in	
work, but no	as long as	concentrate	all creation	
more.(1)	with slight	fully with	activities with	
	pain in	slight	some pain in	
	neck.(1)	difficulty.(1)	neck.(1)	

VOLUME - 11, ISSUE - 04, APRIL - 2022 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra Can do most Drive car as Have a fair Able to engage in of usual long as with degree of most ,but not all moderate work, but no difficulty in because of pain in more.(2) pain in concentrating. neck.(2) neck.(2) (2) Cannot Have a lot of Cannot do Able to engage in difficulty in drive car as any usual few of usual work.(3) long as with concentration.(recreation moderate 3) activities because pain in of pain in neck.(3) neck.(3) Can hardly Have a great Can hardly Can hardly do drive at all deal of do any work any recreation at all.(4) because of difficulty in activities because severe pain concentration.(of pain in neck.(4) in neck.(4) 4) Cannot do Cannot Cannot Cannot do any any work at drive car at concentrate at recreation all.(5) all.(5) activities at all.(5) all.(5)

Table.2 Showing the scores of level of disability

Scores(out of 50)	Level of disability	
0-4	No disability	
5-14	Mild disability	
15-24	Moderate disability	
25-34	Severe disability	
35-50	complete disability	

Results

In the present study the occupation of patients widely differed and as shown below proves profession is a responsible factor for cervical spondylosis

Occupation	Persons affected
Lifting heavy weight	10[40%]
Drivers ,Home makers	8[32%]each
Dhobies,	5[20 %]
H/o prolong sitting and reading	4[16%]
Tailor, Teachers	3[12%] each
Engineer and computer typing work	8[32%]
Welder	1[4%]

Table 3.All Patients results on criteria assessed as shown in the table.

Āssessment criteriα	Chi square value			
	Group A	Group B		
Pain intensity	79.889	85.548		
Personal care	50.822	66.124		
Lifting	31.311	62.142		
Reading	71.428	82.128		
Work	57.056	77.960		
Sleeplessness	33.263	59.920		
Headache	56.581	63.117		
Driving	26.511	30.331		
Concentration	71.293	74.922		
Recreation	62.292	71.943		
No significant change				

Table 4. Results of Overall Assessment of patients is evaluated and presented in table

Groups		Scores_out_of_50 NDI				
_		No	mild	Moderate	complete	Severe
		disability	disability	disability	disability	disability
Group	Pretest	0(0.0%)	0(0.0%)	8(32.0%)	17(68.0%)	0(0%)
A	Midtes	0(0.0%)	18(72.0	7(28.0%)	0(0.0%)	0(0%)
	t		%)			
	Postte	8(32.0%)	14(56.0	3(12.0%)	0(0.0%)	0(0%)
	st		%)			
Group	Pretest	0(0.0%)	0(0.0%)	10(40.0%)	13(52.0%	2(8.0%)
В)	
	Midtes	0(0.0%)	16(64.0	9(36.0%)	0(0.0%)	0(0.0%)
	t		%)			

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	Postte	8(32.0%)	17(68.0	0(0.0%)	0(0.0%)	0(0.0%)
	st		%)			
Group A X2 = 69.083 Group B X2 = 72.12					72.124	
No significant change						

DISCUSSION

Cervical disc disease is an emerging as one of the most common diseases especially of the general population. The prevalence of this disease has been expected to be increasing due to improper lifestyle, poor working, sleeping and sitting postures. There is no classical disease which can be equated precisely with Cervical Spondylosis but on the basis of core pathogenesis, this condition can be correlated to Greeva Asthigatavata.

Greeva Asthigatavata [GA] a type of Vatavyadhi, general Vata provocating factors are accepted as Nidana. VyanaVayu and Shleshaka Kapha [Rao 2001] are essential component to produce Greeva Asthigatavata. The dushyas such as Asthi, Mamsa, Majja;srotas such as Astivaha, Mamsavaha and Majjavaha plays an important role in the pathology of the disease, Greeva Asthigatavata. In this disorder like Cervical Spondylosis age related changes are present, complete reversal is not possible. Aim of the management is to check neurological deterioration, symptomatic relief, prevent further progression and to develop feeling of well-being.

Prevalence of GS is more common in fourth, fifth and sixth decade [Moon et al. 2016] of age as there is decrease in hydration of the intervertebral disc leading to cervical disc herniation or degeneration resulting in manifestation of cervical spondylosis and the data supports the same.

The present study revealed GS is more prevalent in some occupation[Table 3].It is due to improper ergonomics with continuous working at one place, driving long distances, excessive physical strain and activities which leads to undue stress on the neck or faulty sitting and working postures.

The procedural effect of Greeva basti does the stanika snehana and swedana helping relieving the spasm of the muscles, improving the circulation to the local area and increasing the pain threshold where by reducing the pain in patient.

The therapeutic effect of Greeva basti using Mashabaladi taila is attributed to its transdermally permitting snehana, dhatu poshana and vedanasthapaka property.

Nose is one among the Panchagnaanendriya, whose functions is not limited to olfaction and respiration and is also considered as a pathway for drug administration. So the drug administered as nasya reaches to the brain and eliminates the morbid Doshas responsible for producing the disease. Present study shows, thus the drug administered through nose probably act on vital points located in brain and act on organs related to these points this is mentioned in Ashtanga Sangraha and is explained as Nasa being the entry to Shira, the drug administrated through nasasrotas reaches Shringataka -a Sira Marma by Nasastrotas and spreads in the Brain reaches at a junction place of Netra , Shrotra , Kantha, Siramukhas and remove or detach the morbid Doshas present at this level[Smita, Swapnil 2016]. The therapeutic effect of Nasyakarma with Kubjaprasarinitaila is absorbed through transmucosal route and possess snehana, dhatu poshana and vedana sthapaka properties [Lokhande et al. 2016].

Mashabaladi taila was selected as it is indicated in vatarogas. Individual ingredients of Mashabaladi taila possess Madhuratikta rasa, Laghu and snigdhaguna, Ushnavirya, Madhuravipaka and Kaphavatashamaka [Kaviraj 2006]. Hence Mashabaladitaila acts as Brhimana, Vedhanasthapaka, Stambha hara, Asthidhatu poshaka and Vatahara property.

Most of the ingredients of Vatahara Kashaya [4th formula] Ghana vati such as Musali, Eranda, Yavasa possess Madhura rasa. Punarnava, yavasa, eranda possess tikta, kashaya rasa. Musali, shunti, eranda possess snigdhaguna. Karanja, Haritaki, Eranda, shunti, punarnava possess ushnaveerya. Haritaki, shunti, eranda possess Madhuravipaka Vatakaphahara property. Hence it can be concluded that which acts as Shoola hara, Brihmana, Sthambha hara.

It was observed that reduction in these parameters was sustained for longer duration in Group B (trail group). This was probably due to added effect of Nasyakarma with Kubjaprasarinitaila.

All the ingredients of Kubjaprasarini taila are predominantly vatahara. Here the pradhana dosha is vata. It also possessed Brihmana, Stambhahara, Asthi poshaka, Vedana stapaka and Vata Kapha pradhana tridoshahara properties [Brahmashankara 2008].

Prasarini could reduce the degeneration changes in the articular cartilage. Tila Taila acts as Analgesic and Antioxidant. Yasthimadhu, Bala, Yavasa, Shunti, Eranda acts as anti – arthritic and anti-inflammatory. Punarnava, Vacha, Devadaru, Gajapippali, Rasna, Chitraka acts as -antioxidative, anti-inflammatory, neuroprotective.

Thus action of all these drugs in combination with Greeva basti and Vatahara kashaya [4th formula] Ghana vati contributed in sampraptivighatana of Greeva Asthigatavatavis Cervical Spondylosis.

In conclusion, our study showed all 50 subjects had degenerative changes in the cervical spine, but the level of degeneration varied from one subject to other. On the basis of concepts, analysis and clinical observations made in this study, the following conclusions were drawn. On comparing the overall effect of the study, trial group (Group B) showed better results than control group (Group A). Hence, Kubjaprasarini has a better role in the management of Greeva Asthigatavata.

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