

Effect of Sri Lankan traditional medicine *Jathiphaladi Lepa* and *Heen Demata Yusha Nasya* on *Manibandha Shoola* [Carpal Tunnel Syndrome]- A Case Report

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ABSTRACT:

Shoola is one of the most prominent characteristics of *VataRoga*. *ManibandhaShoola*, the pain in wrist joint is present in ailments such as *Twaggata Vata* and *Majjastigata Vata*. Carpal tunnel syndrome (CTS) is a common condition that causes pain, numbness, and tingling in the hand and arm. Carpal tunnel syndrome is also a cause of *Manibanda Shoola*. It is one of the commonest neuropathies which occur due to compression of median nerve at wrist joint. In *Nasya Karma*, medicines are administered through the nasal passage. This is a specific therapy for diseases in the arm such as *Avabahuka* and *Vishvachi*. Therefore, *Nasya Karma* may be beneficial in treatment of *Manibandha Shoola* (carpal tunnel syndrome). In the present study, a patient suffering from CTS was treated with *Heen DemataYusha Nasya* for three consequent days followed by application of *Jathiphaladi Lepa* for fourteen days. Total duration of the treatment was seventeen days. Progress of the treatments evaluated through symptomatic relief. Pain extending to shoulder from fingers and disturbance of sleep due to pain were completely relieved after completion of treatment. Pain and paraesthesia in palmer aspect of hands and fingers, pain extending to forearm and arm from fingers, tingling sensation in the hand were partially relieved after treatment. It is concluded that *Heen Demata Yusha Nasya* and external application of *Jatiphaladi Lepa* is beneficial in treatment of *Manibanda Shoola* (carpal tunnel syndrome).

Key words: Carpal tunnel syndrome, *Heen Demata Yusha Nasya*, *JathiphaladiLepa*, *Manibandha Shoola*, *Nasya Karma*

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Introduction:

Charaka Samhita mentions eighty types of *Vata Vyadi*^[1] and *Shoola* (pain) is one of the salient clinical features which can be present anywhere in the body when *Vata Dosha* is vitiated.^[2] If it is present at *Manibandha* (wrist joint), then it is known as *Manibandha Shoola*. Ayurveda describes that pain may present in joints in *Tawaggata Vata*^[3] and *Majjashigata Vata*.^[4] Therefore, there may be pain at the wrist joints (*Manibandha Shoola*) in these diseases. *Vishvachi* is a disease described in Ayurveda which causes loss of functions of the arm by affecting *Kandara* (tendons / nerves) in fingers, arms and shoulders.^[5] *Avabdhahuka* is another disease which occurs in shoulder region, due to contraction of *Shira* (tendon / nerve) of that region.^[6]

Carpal tunnel syndrome is also a cause of pain in wrist joint (*Manibandha Shoola*). It occurs due to compression of median nerve at wrist. Pain or muscle weakness may prevent a person from doing tasks at work, day-to-day activities and lead to depression or low self-esteem. This can be a main cause to reduce the productivity of a person.^[7]

Nasya Karma is one of the therapeutic procedures described in treatment of *Avabdhahuka*^[8] and *Vishvachi*.^[9]

Manibandha Shoola is also a disease in the region of the wrist. Hence *Nasya Karma* will be beneficial in treatment of *Manibandha Shoola*. Many effective traditional medicinal preparations are available in Sri Lanka. Dr. Nandani Karunarathne, a retired medical officer at Ayurveda teaching hospital, Borella, treats patients suffering from carpal tunnel syndrome using *Jathiphalaadi Lepa* successfully. So far, no scientific study has been conducted to evaluate the effect of these treatments. Hence, it was decided to observe and evaluate the effect of these treatments on a patient suffering from carpal tunnel syndrome.

Case Report:

The study was conducted at Ayurveda teaching hospital, Borella, Sri Lanka. A 47-year old female patient with complaints of pain and paresthesia on palmar aspect of hands and fingers, pain extending from fingers to forearm, arm and shoulder and tingling sensation in the hand was selected for the study and admitted to the hospital. Selected patient was subjected to systemic examinations. Severities of the symptoms were recorded using a specially prepared Proforma. Grading scale of the symptoms is given below.

Grading Scale of symptoms:**Pain in palmar aspect of hands**

Normal	0	No pain
Mild	1	Occasional pain
Moderate	2	Intermittent pain
Severe	3	Often pain
More severe	4	Continuous pain

Pain in the fingers

Normal	0	No pain
Mild	1	Occasional pain
Moderate	2	Intermittent pain
Severe	3	Often pain
More severe	4	Continuous pain

Pain extending from fingers to forearm

Normal	0	No pain
Mild	1	Occasional pain
Moderate	2	Intermittent pain
Severe	3	Often pain
More severe	4	Continuous pain

Pain extending from fingers to arm

Normal	0	No pain
Mild	1	Occasional pain
Moderate	2	Intermittent pain
Severe	3	Often pain
More severe	4	Continuous pain

Pain extending from fingers to shoulder

Normal	0	No pain
Mild	1	Occasional pain
Moderate	2	Intermittent pain
Severe	3	Often pain
More severe	4	Continuous pain

Paraesthesia on fingers

Nil	0	No Paraesthesia
Mild	1	Occasional Paraesthesia
Moderate	2	Intermittent Paraesthesia
Severe	3	Often Paraesthesia
More severe	4	Always Paraesthesia

Paraesthesia on palmer aspect of hands

Normal	0	No Paraesthesia
Mild	1	Occasional Paraesthesia
Moderate	2	Intermittent Paraesthesia
Severe	3	Often Paraesthesia
More severe	4	Always Paraesthesia

Tingling sensation in the hand

Normal	0	No tingling sensation
Mild	1	Occasional tingling sensation
Moderate	2	Intermittent tingling sensation
Severe	3	Often tingling sensation
More severe	4	Always tingling sensation

Disturbed sleep due to pain

Normal-0	Sleep not disturbed due to pain
Mild- 1	Sleep occasionally disturbed due to pain
Moderate-2	Sleep intermittently disturbed due to pain
More severe-4	Sleep disturbed often due to pain
More severe 4	Sleep constantly disturbed due to pain

After obtaining consent, the selected patient was treated for 17 days. *Nasya Karma* was performed from Day1 to Day 3 using *Heen Demata Yusha Nasya*. This was followed by external application of *Jathiphalaadi Lepa* from Day 4 to Day 17. Response to the treatment was evaluated through symptomatic relief.

Method of preparation of Jathiphalaadi Lepa:

Thirty grams (30g) each of kernel of *Myristica fragrans* (Family: Myristicaceae; Sinhala name: *Sadikka*), mace of *Myristica fragrans* (Family: Myristicaceae; Sinhala name: *Vasavasi*), flower bud of *Eugenia caryophyllata* (Family: Myrtaceae; Sinhala name: *KarambuNeti*), seeds of *Coriandrum sativum* (Family: Umbelliferae; Sinhala name: *Kottamalli*), cloves of *Allium*

sativum (Family: Alliaceae; Sinhala name: *Sudulunu*), rhizomes of *Zingibar officinale* (Family: Zingiberaceae; Sinhala name : *Inguru*) and immature fruits of *Citrus aurantifolia* (Family: Rutaceae; Sinhala name: *DehiGeta*) were taken and mixed well. [Fig-1] 200ml of water was added to the mixture and cooked till it becomes dry. The resultant preparation was ground with bee's honey. This paste was used as *Jathiphalaadi Lepa*.

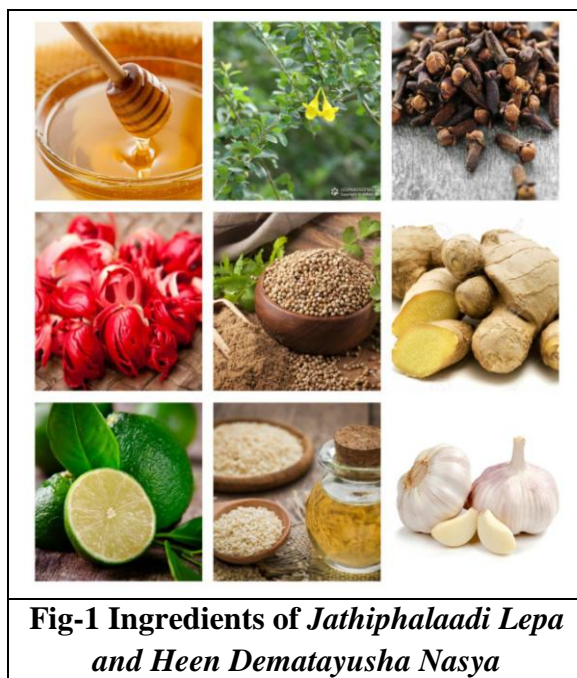


Fig-1 Ingredients of Jathiphalaadi Lepa and Heen Dematayusha Nasya

Method of preparation of Heen Demata Yusha Nasya:

50g of fresh leaves of *Gmelina asiatica* (Family: Verbenaceae ; Sinhala name : *Heen Demata*) were pounded well and juice was extracted by squeezing. 30ml of juice was mixed with 10ml of sesame oil. This mixture was known as *Heen Demata Yusha Nasya* and used in *Nasya Karma*.

Procedure of Nasya Karma:

Nasya Karma was conducted for three consecutive days, around 10.00 a.m. Patient was made to lie down on the bed on her back with arms by the sides and legs straight. The head was tilted back a little by slightly raising the neck. Then Narayana oil was applied on the patient's face and neck (*Snehana*). After applying oil, fomentation (*Swedana*) was done using steam from hot water.

The *Heen Demata Yusha Nasya*, was warmed to body temperature by keeping in a hot water bath. Six drops of this preparation was instilled in to one of the

nostril. Then after closing the opposite nostril, the patient was advised to inhale the juice. Then the preparation was put in to other nostril, and the patient was advised to inhale the juice again, in the same way. Then the palms and the soles of the patient was rubbed vigorously. The patient was advised to spit out the secretions and to avoid swallowing *Nasya Aushadha* and secretions.

After completion of *Nasya Karma*, *Pashchath Karma* such as *Gandusha* (gargling with warm water mixed with common salt) and *Dhoomapana* (medicated smoking) were performed. *Dhoomapana* was performed making the patient to inhale smoke emitting from extinguished wick. The wick was prepared by wrapping a thick mixture (similar to a dough mix in consistency) of turmeric powder and ghee, in a white cotton cloth, burned and extinguished.

Results:

After completion of *Nasya Karma* alone, no changes in symptoms were observed in the patient. After completion of entire treatment, it was observed that sleeplessness and the pain extending from fingers to shoulder were completely

relieved. Pain and paraesthesia on palmer aspect of the hand and in fingers were partially (66.67%) relieved. 50% relief was observed in tingling sensation in hand and in pain extending from fingers to forearm or arm (table 1).

Table-1: Percentage of reduction of symptoms:

Clinical features	BT	AT			
	Grade	After <i>Nasya Karma</i>		After entire treatment (<i>Nasya Karma</i> followed by application of <i>Jathiphalaadi Lepa</i>)	
		Grade	Percentage of relief	Grade	Percentage of relief
Pain on palmer aspect of hand	3	3	0%	1	66.67%
Pain on fingers	3	3	0%	1	66.67%
Paraesthesia on palmer aspect of hand	3	3	0%	1	66.67%
Paraesthesia on fingers	3	3	0%	1	66.67%
Tingling sensation in the hand	2	2	0%	1	50%
Pain extending from fingers to forearm	2	2	0%	1	50%
Pain extending from fingers to arm	2	2	0%	1	50%
Pain extending from fingers to shoulder	1	1	0%	0	100%
Disturbed sleep due to pain	1	1	0%	0	100%
BT = Before Treatment; AT = After Treatment					

Discussion:**Effect of *Heen Demata Yusha Nasya*:**

Nasya Karma is described as one of the therapeutic measures in treatment of *Avabahuka*, *Vishvachi* and other disorders

especially in *Urdhava Jatrugata Pradesha*.^[8,9,10] *Nasya Karma* may be beneficial in treatment of *Manibanda Shoola* (carpal tunnel syndrome).

When clinical features of carpal tunnel syndrome (*Manibandha Shoola*) is considered, it is a disease occurred mainly by vitiation of *Vata Dosha*. Ayurveda pharmacodynamic properties of *Gmelina asiatica* is not described in authentic texts. *Sesamum indicum* possess *Madhura Rasa*, *Guru* and *Snigdha Guna*, *Ushna Veerya*. Hence it pacifies vitiated *Vata Dosha*. Hence *Heen Demata Yusha Nasya* is beneficial for diseases originated by vitiation of *Vata* including *Manibandha Shoola* (carpal tunnel syndrome).^[11] Antioxidant^[12,13], analgesic^[13] and anti-inflammatory^[14] properties of ingredients of *Heen Demata Yusha Nasya* are scientifically proven.

Effect of *Jathiphalaadi Lepa*:

Ingredients of *Jathiphalaadi Lepa* possess *Madhura* and *Amla Rasa*, *Guru* and *Snigdha Guna*, *Ushna Veerya* and *Madhura Vipaka*. Hence it pacifies vitiated *Vata Dosha*. Hence *Jathiphalaadi Lepa* is beneficial for diseases originating by vitiation of *Vata Dosha* including *Manibandha Shoola* (carpal tunnel syndrome)^[15]. *Jathiphalaadi Lepa* is effective in reducing symptoms of *Manibandha Shoola* (carpal tunnel syndrome) due to its analgesic, anti-inflammatory and antioxidant properties of its ingredients.^[16-21]

Conclusion: While *Nasya Karma* alone did not show immediate results, it is concluded that the combined therapy of *Heen Demata Yusha Nasya* followed by external application of *Jathiphalaadi Lepa* is beneficial in treatment of *Manibandha Shoola* (carpal tunnel syndrome).

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