

Efficacy of Ekanga Seka and Upanaha Sweda in the Management of Carpel Tunnel Syndrome – A Case Study

Dr Ramyashree D¹ Dr Varsha Kulkarni² Dr Shilpa M Sutagatti³

1. PG Scholar, Department of PG Studies in Panchakarma, Government Ayurveda Medical College, Mysore, Karnataka, India
2. Professor and Head, Department of PG Studies in Panchakarma, Government Ayurveda Medical College, Mysore, Karnataka, India
3. Assistant Professor, Department of PG Studies in Panchakarma, Government Ayurveda Medical College, Mysore, Karnataka, India.

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ABSTRACT

Carpal Tunnel Syndrome is a common entrapment neuropathy and most often occurs due to repetitive use of wrist. It is due to entrapment of the Median nerve within the Carpal tunnel leading to paresthesia, tingling sensation, numbness and muscle weakness. Trauma or Abhigata being a cause, it can be compared with Manibandha Marmabhighata. We hereby report a case of 37 years old female patient of Carpal Tunnel Syndrome complaining of pain, numbness in right wrist which was treated for 2 months under an Allopathic Physician with no significant relief, came to our OPD. The treatment given includes Ekanga Seka and Dashanga Kumari Upanaha for a period of seven days. Significant clinical improvement was reported in quality of life after the treatment. Therefore, it can be concluded that these selected treatment modalities are beneficial in managing carpal tunnel syndrome and can avoid surgery.

Key words: Carpal Tunnel Syndrome, Manibandha Marmabhighata, Ekanga Seka, Dashanga Kumari Upanaha

I. INTRODUCTION

Carpal Tunnel Syndrome is the most common form of entrapment neuropathies. It is characterized with numbness, paresthesia, pain, along the median nerve distribution, and in advanced cases it will lead to wasting and finally loss of function of hand. The condition is most commonly caused by excessive work to the wrist and is usually associated with repetitive activities such as typing, household works. Most cases are idiopathic other than those related to occupational or environmental associations. Some predisposing factors like Hypothyroidism, Diabetes Mellitus, injuries may also cause the symptoms. CTS is the

most commonly reported nerve compression syndrome with an overall prevalence of 2.1% of general population¹.

In Ayurveda there is no disease which can be exactly correlated with Carpal Tunnel Syndrome. Based on the signs and symptoms it has been correlated with Vishwachi, Sandhigata Vata, Mamsa Shosha, Manibandhasthitha Snayugata Vata, Kaphavruta Vaata according to different views.

A comprehensive understanding of Carpal tunnel syndrome can be derived using the principles of Marmabhighata. Acharya Sushruta explained 107 vital points of the body termed as Marmas². Rujakara Marma is a type of Marma classified based on the effect of injury to it. Rujakara Marma are 8 in number situated 2 each in Manibandha and Gulpha and 4 in Kurchashira³. Manibandha Marma is a type of Sandhimarma, is 2 Angula in length located at wrist joint. Any injury to this leads to Ruja and Kuntata (Karasya Akarmanyatwam)⁴.

The carpal tunnel is located on the flexor side of fore arm and the site correlates the Manibandha Marma. Accidental injuries, any heavy object fall on wrist joint, excess work with wrist joint etc can cause Aghata on Manibandha Marma. Hence the Carpal Tunnel Syndrome can be related to Manibandha Marmabhighata. Considering the symptoms manifested, the pathogenesis can be formulated; as Acharya Charaka said the aggravated Vaayu produces various diseases based on the Nidana and Sthana Samshraya⁵. It's known that in Abhigata, Vata and Rakta are involved and to overcome from this one has to adopt Pittavatahara Chikitsa on the basis of Ashraya Ashrayi Bhava of Pitta and Rakta. Hence Ekanga Seka and Dashanga Kumari Upanaha for a period of seven days was followed.

II. CASE REPORT

A female patient of age 38years complaining of pain in right wrist joint with numbness and tingling sensation in the last 6 months approached our OPD. The complaint was associated with mild burning sensation. There was history of trauma, following which she continued with the house hold work. Due to intolerable pain, she was not able to do her routine work. Her sleep was disturbed since then due to the shooting type of pain that comes due to the compression over the right wrist while sleeping. The pain aggravates during activities, cold climate, especially in the evenings or night hours. She went to nearby clinic and took Allopathic treatment but did not found relief.

History of past illness

History of trauma and the household works.

Treatment history

Was on Allopathic treatment for the past 2 months.

Systemic examination –

Inspection – No swelling, No Discoloration

Palpation – Mild tenderness of Right wrist joint

Phalens test – Positive

Tinels sign – Positive

Range of Movements – Restricted due to pain

Based on the nerve conduction tests, she was diagnosed with Carpal Tunnel Syndrome.

Investigations –

ESR – 30 mm/hr

Ashta Sthana Pareeksha

Nadi – Mandooka Gati, Pittaja Nadi

Mala- once daily, Srishta, Abaddha

Mutra- 5-6 Vegas, Prakrita Varna

Jihva –Alipta

Shabda – Prakrita

Sparsha– Prakrita

Druk – Prakrita

Akriti – Madyama

Dashavidha Pareeksha

Prakriti – Vatapittaja

Vikriti – Vatapitta

Saara – Madyama

Samhanana- Madyama

Saatmya – Katu Rasa Pradhana

Satwa – Madyama

Aharashakti–Abhyavara Shakti- Madyama

Jarana Shakti – Madyama

Vyayama shakti – Avara

Vaya – Madyama

Pramana–Height – 5ft 4 inch

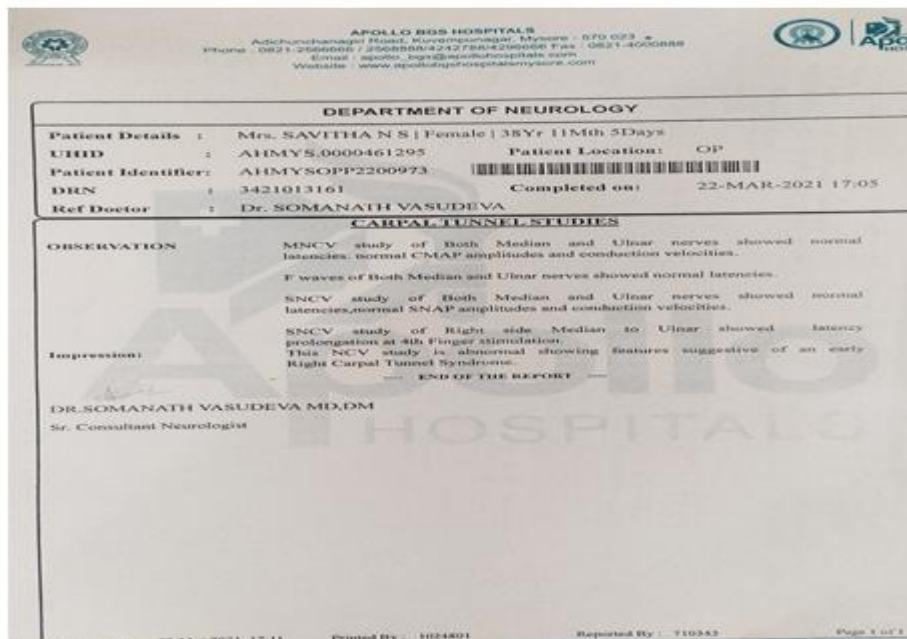
Weight – 62 kg

Vitals-

BP-130/90mm of Hg

Pulse-72/min

Respiratory rate-16/min



Nidana Panchaka

Nidana – Abhighata to Manibandha followed by Ativyayama (lifting water filled bucket, washing vessels and other household works)

Poorvaroop – Manibandha Shoola

Roopa – Shoola, Spandana, Karmakshaya of Manibandha Sandhi

Upashaya – Rest

Anupashaya- Vyaayama, Sheeta Kaala (use of cold water, evening hours)

Samprapti –

Abhighata to Manibandha



Rakta Dushti resulting Pitta Dushti due to Ashraya Ashrayi Bhava



Sthana Samshraya in Manibandha



Ativyayama of Manibandha



Results in Vata Prakopa



Katu rasa Pradhana Ahara Sevana



Further Dushti of Vata, Pitta and Rakta



Result in the dysfunction of Vyana Vayu, Snayu, Kandara of Manibandha



Characterised by symptoms Shoola, Spandana, Karmakshaya in Manibandha.



Manibandha Marmabhighata

Treatment planned

| | |
|-------------------------|--|
| Ekanga Seka | Ksheerabala Taila and Pinda Taila – 30 min for 7 days from Elbow till little finger of Right hand |
| Dashanga Kumari Upanaha | Upanaha prepared of Kumari pulp, Egg white, Chinchu Patra Kalka and Dashangalepa Choorna -for 7 days |

| | |
|--------|---|
| Orally | <ul style="list-style-type: none"> ○ Amrutadi Guggulu 1-1-1 ○ Cap Palsinuron 1-0-1 ○ 10ml of Gandharvahastadi Eranda Taila daily at bed time with equal quantity of warm water |
|--------|---|

Procedure

| | |
|-------------------------|--|
| Ekanga Seka | The oil was made Luke warm and poured over the effected limb from elbow till little finger for 30 min maintaining the constant temperature. |
| Dashanga Kumari Upanaha | Kumari pulp, Egg white, Chinch Patra Kalka and Dashangalepa Choorna are mixed to form a homogenous thick paste. The Lepa is heated, applied over affected part and covered with bandage. Left over for 6 hours and then removed. |

Result

With the treatment for 7 days patient got good relief from the complaints, ESR reduced to 6 mm/hr and got discharged with oral medicines.

| | Before treatment | After treatment |
|-----------------------------|----------------------|--------------------------------------|
| Pain (VAS Scale) | 7 | 3 |
| Range of Movements of wrist | Restricted with pain | Movements possible with minimal pain |
| ESR | 30 mm/hr | 6 mm/hr |

III. DISCUSSION

Manibandha Sandhi is the region in between the Paani and Hasta of upper limb. Manibandha Marma is located at the region of Manibandha Sandhi. Based on the review of the Rujakara Marma and the underlying anatomical structures, it can be incorporated that Manibandha Marma is radio-carpal joint as well as distal Radioulnar joint and its allied structures presented in Marma Vastu.

The median nerve in the carpal tunnel lies in close quarters with nine tendons. Entrapment of the nerve at the wrist is usually due to excessive use of the wrist but on occasion may be secondary to tenosynovitis with arthritis or local infiltration. Females in their 40 to 50's (middle age) are the usual victims. Carpal Tunnel Syndrome is often idiopathic. It has been associated with pregnancy, amyloidosis, flexor tenosynovitis, overuse phenomenon, acute or chronic inflammatory conditions, traumatic disorders of the wrist and tumors within the carpal tunnel. Injuries are categorized into acute injuries and chronic injuries. Acute injuries are traumatic, and chronic injuries are due to overuse of the hand and wrist. The main complaint is progressive weakness and impairment of fine movements. Pain, tingling and numbness along the sensory distribution of the median nerve are the presenting features. The management

include,

- a. Conservative management- Use of wrist splint, local Corticoid Infiltration
- b. Surgery – Surgical decompression of median nerve⁶.

In Ayurveda the management of a disease always comply the principle of Dosha Vipareeta and Vyadhi Vipareeta Chikitsa. In CTS the Dosha involved is Vyanavata, and Pitta and Rakta Dushti is seen as a result of Abhigahaata. Hence the treatment should be Pittavatahara. So Seka and Upanaha are idealone.

First line of treatment in vitiation of Vata is Snehana and Swedana. Ekanga Seka in terms of Tailaseka is a form of SnigdhaSweda in which Snehana and Swedana are applied simultaneously. Parisheka is one among the ChaturvdihaSweda explained by Acharya Sushruta which counteracts Pitta Dosha⁷. The procedure Parisheka has Aap and Agni Mahabhuta predominance. The Dravyas used here are also Vatapittahara.

Tila Taila is best known for its Vatahara and Shoolahara properties. It is said as "Tailam Samyogasamskarath" that means Taila by Samskara gains the Guna Karma of Samskarita Dravyas⁸. When Taila is processed with the ingredients like Manjishta, Madhuchista, Sarja

Rasa, Sarivawhich are having Sheeta Veerya and Vatarakta Nashana property, it works in the reduction of symptoms. When used externally Taila helps in formation of lipoidal bond with other drugs thus helps in the penetration of drug molecule. Hence it increases the rate of transdermal drug delivery. It induces hyperthermia which improves local blood and lymphatic circulation and thereby improving local tissue metabolism. It reduces inflammation by modifying secretion of various inflammatory mediators like Histamine. It relaxes local stiffness by physical effect of heat and there by reduces pain⁹.

The probable mode of action of Ksheerabala Taila could be analyzed by its Rasapanchaka. All the three ingredients Bala, Ksheera and Taila possess Madhura Rasa and Madhura Vipaka. It mitigates Vata Dosha. Snehana Karma with Ksheerabala Taila nourishes the Shleshaka Kapha stimulate sensory nerve ending and provide strength.

Upanaha is a type of Sweda mentioned by Sushrutha indicated in Vataja Vikaras¹⁰. Dashanga Lepa is found to be very effective in relieving pain which is caused by an increased Prostaglandin during an inflammatory reaction. It has an analgesic effect which aids in combating the inflammation. Kumari is Tridosha Shamaka. Aloe Vera inhibits the Cyclooxygenase pathway and reduces Prostaglandin production. Chinchha is Kaphavata Shamaka. It is found to be Anti-inflammatory and Analgesic action. Kukkutanda has Madhura Rasa and Dhatuposhana property. Egg white possess high amount of Vit B2, B3, and B5. It also has significant amount of Vit B1, B6, B8, B9 and B12. Egg is also a major source of Choline it has important and varied functions in both cellular maintenance and growth. As it is lipid soluble it easily moves into the papillary region of the dermis which inhibits the Histamine production thus creating Anti-inflammatory property.

Thus, the both treatments, Ekanga Seka and Upanaha resulted in obtaining the desired effect in the present study.

IV. CONCLUSION

Carpal Tunnel Syndrome is a disorder of peripheral nerve and can be understood as Vyana Vayu dysfunction at the level of Manibandha. It's associated with Pitta Rakta Dushti due to Abhigata to the Manibandhasandhi Marma. The presentation

of the disease varies with disease progression and hence the assessment of the Doshas is important for planning the treatment. Ashere Pittavata Dushti was seen, it can be concluded that Ekanga Seka and Dashanga Kumari Upanaha were effective treatment modality in the management of Carpal Tunnel Syndrome. The success in present case has given encouraging results for future practice. Further clinical studies should be undertaken to validate the result of the treatment in a large sample size.

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