

AYURVEDIC APPROACH IN THE MANAGEMENT OF MUSCULOSKELETAL
DISORDERS W.S.R TO CARPAL TUNNEL SYNDROMEV. D. Neha Jolly^{1*} and V. D. Punita Sharma²PG Department of Swasthritta and Yoga¹, PG Department of Sharir Kriya²,
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ABSTRACT

Carpal Tunnel Syndrome (CTS) is by far the most persistent compression neuropathy & comprehend 45% of all non-traumatic nerve lesions. Women are affected three times as frequently as men & manifestation generally occurs over the age of 30. Carpal tunnel syndrome or median neuropathy at the wrist is defined as a medical condition in which the median nerve is compressed at the wrist leading to various symptoms include paresthesia, numbness, pain, muscle weakness in the hand, mostly occur as a result of inflammation or collapse of carpal tunnel that allows nerves to pass through the wrist. Common complaint of office workers, drivers associated with repetitive activities such as typing. In most patients, CTS gets worsen over time, so early diagnosis & treatment are important. If CTS left untreated, symptoms can last a long time & get worsen. Ayurveda plays very important role in the management of CTS. In Ayurveda literature, upper limb pathologies have been described in various contexts. But no disease condition pertaining to hand & wrist has been described. As per Ayurveda, CTS is a disorder of kapha vata vitiation. Considering treatment aspect various Ayurvedic Panch karma procedures like Abhyanga, Swedana, Patra pinda sweda along with other Ayurvedic modalities have been elaborated.

KEYWORDS: Carpal Tunnel Syndrome, Khalli, Neuroopathy, Viswachi.**1 INTRODUCTION**

Carpal tunnel syndrome involves compression of median nerve within the carpal tunnel. It is a compressive neuropathy due to chronic inflammation of the flexor retinaculum which will cause compression to the median nerve and associated structures. It is the most common nerve entrapment neuropathy, responsible for 90% of all neuropathies. An estimated 10% of the population being affected by this ailment as evidenced by the American Academy of Neurology. CTS is considered the most common nerve compression disorder of the arm, with various researches reported prevalence rates of 3.8% in women and 2.7% in men. CTS belongs to a ménage of disorders named as Cumulative Trauma, defined as the excessive wear & tear on tendons, muscles & sensitive nerve tissue acquired by constant use over extended period of time, improper work positioning, repetition or force, ultimately results in the inflammation of soft tissues, tendons and compression of peripheral nerves.^[1] The principal risk factors found in work station environments that can lead to CTDs are, Awkward posture, Repetitive actions from typing, keying etc & use of excessive force while typing. CTS is a clinical entity comprises of Pain, Paresthesia, Tingling sensation or numbness & weakness of hand. A number of factors have

been associated with CTS include Nerve damaging conditions (such as Diabetes), Inflammatory conditions (such as Rheumatoid arthritis), Obesity, alterations in the balance of body fluids, Menopause, Thyroid disorders etc. Signs include in the diagnostic procedure of CTS are Tinel's sign, Phalen's Maneuver, two point Discrimination test. In most of the patients, CTS gets pathetic over time, so early diagnosis and therapeutic treatment is important. Continuous pressure on the median nerve leads to permanent nerve damage and worsening symptoms.

2 MATERIALS AND METHOD

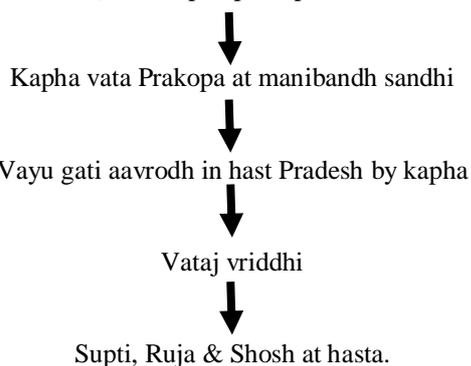
All the Ayurvedic classics and modern text along with journals and electronic databases has been thoroughly searched.

3 Ayurvedic Persuasion

In Ayurveda classics Acharya has mentioned the importance of all five types of vata in vataja vyadhi. Acharya mentioned that vayu plays very important role in all the activities of body.^[2] It is called as the strength of the body specifically vyana vayu plays very important role in the activities like gati prasara(extension), akshep(contraction), unmesh and nimesh.^[3] When vyana

vayu get vitiated then it will leads to formation of disease having sign and symptoms of neuropathy which we seen in CTS. Ayurvedic literature has mentioned most of the neuro muscular diseases of upper limb in context of vataja vyadhi, so exact correlation of the CTS is not possible, but there are some conditions mentioned in vataja vyadhi which can be correlate with CTS. Neuromuscular diseases of upper limb along with pathologies & symptoms described in ayurveda:- Avabaahuka, Arditha, Amsa marmaghatha, Ekang roga, Raajyakshma, sandhighat vata etc There are certain conditions mentioned in ayurvedic text like viswachi and khalli which closely resemble the features of carpal tunnel syndrome in advanced stages. Viswachi^[4] is characterized by loss of function of hand following dysfunction of vayu in the kandara of hand, Khalli^[5] is also having same features along with pain. While considering the symptoms manifested the pathogenesis can be formulated as Acharya charaka has described that the aggravated vayu produces various diseases depending on hetu and sthana vishesha but chakrapani while commented on this explained that hetu vishesha means kapha avrodh is also act as one of the most important causative factor.^[6] Hence the pathogenesis of CTS can be formulated as under.

Hetu sevan (Vata Kapha prakopaka aahar /vihaar)



Dosha Dominance--- Kapha vataja
 Dushya --- Mansa Medas
 Sthana Samsraya--- Maniband

Acharya Vagbhata has described the Symptom Prasupthi in context of numbness in CTS. Acharya mentioned that kapha aggravates vayu, this vitiated vayu reaches skin and skin get dry, become pale with loss of sensation with little or no itching.^[7]

3.1 Treatment Aspect

According to contemporary science there are so many treatments mentioned in the context of CTS, like Work place task modification, wrist splints, Nerve and tendon gliding exercises, steroid injections to the mouth of carpal tunnel, carpal tunnel decompression, surgical interventions, conservative managements like physiotherapy short wave diathermy, anti inflammatory drugs, diuretics etc Thus management has not tremendous result and also not helpful in treating the root cause of disease or arresting the progression of disease.

Hence it is very essential to develop effective management guidelines for better result and improving the quality of life. Ayurveda plays a very important role in the management of neuro muscular disorder. Being kapha vataja pradhan vyadhi CTS managed under the siddhanta of dosha and vyadhi vipareet chikitsa .Starting with the preventive measure along with panchkarma procedures have a great significance in the management of CTS. Prevention is better than cure clearly explained in Ayurveda as Sankshep kriya yogey nidan parivarjanam^[8] is one of the most important approach in the management of CTS.

3.1.1 Ayurvedic Modalities

In Ayurveda various Ayurvedic modalities have been used in the treatment of Carpal tunnel syndrome starting from the prevention of all the causative factors which can lead to the formation of CTS like vata kapha prakopaka aahar vihaar (like all the activities like repetitive typing, working in awkward position & postures). Treatment of carpal tunnel syndrome is based on the siddhant of kapha avarat vata chikitsa^[9] along with the nirupstambh vata vyadhi chikitsa. First the avaran chikitsa should be done by using katu, amal, lavan and ushan virya dravya.^[9] In nirupstambh vata treatment of aavaranless vata dosha should be done by using different varieties of snehapan.^[10]

Dincharya^[11]-All the routines should be followed specifically abhyanga, vyayama, brmhana nasya.

First the avaran should be removed by using vish garbha taila or maha visha garbha taila and then dhanwantar taila or pinda taila should be used for the treatment of vitiated vata followed by using the shodan as well as brmhana nasya. In case of exercise, Poses in which a significant amount of the body, s weight should be avoided or modified and an overall improvement in posture will help to avoid the stress that contributes to CTS e.g Tadaasan, stretching of wrists, anjali mudra or prayer position.

Ritucharya^[11]-Following all the pathya aahar vihaar in the management of CTS depending upon the sanchay, prakopa and prasaman so that the disease will not reach the advanced stage.

Aahar:- Vata kapha shamak aahar is also one of the important factor in the management of carpal tunnel syndrome. Kapha shamak aahar, shukdhanya (makka, bazra, godhum) shimbhidhanya (mudhag, kultha), fal varga (tank, mridwika), dugdh varga (milk in less quantity, azah dugdh). mansa varga (goar tittar mansa). Vatashamakaahar, shukdhanya (godhum, tandul), shimbhidhanya (mudhaga), phalvarga (kadali, narikel), dugdh varga (dudh, navneet, ghrith), peya (fruit juice) mamsa varga (kukkut mansa). Vata kapha shamak aahar dravyas (jambeer, mooli, tulsi, tumbroo, jal pippal, khati changeri).^[12]

Dosha vipareeta chikitsa:-Rookshan chikitsa to combat kapha vitiation and snigdha ushan chikitsa to combat both kapha and vata vitiated dosha.^[9]

Vyadhi vipareeta chikitsa:-Anulooman chikitsa should be formed according to the symptoms of disease.^[13]

Panch karma chikitsa:-Following panch karma modalities can be used in the management of carpal tunnel syndrome.

- (1) Snehana with taila processed with ushana teekshana and kapha vata har dravya in the form of abhyantay shaman snehapana as well as bahaya abhyang with dhanwantar taila. Only after removing the avaran.
- (2) Swedan used in the management of carpal tunnel syndrome is avagahan sweda with pind taila or dhanwantar taila.
- (3) Shaali shasthik patra panda sweda also helpful in the treatment of Carpal tunnel syndrome.
- (4) Sanshodhan(sneha virechan) is used in the management of Carpal tunnel syndrome like tilvak ghrit, erand taila.
- (5) Vasti is also one of the most important procedure so niruha and anuvaasan vasti can be helpful in arresting the disease.
- (6) Madhura yapan vasti also used the treatment of neuro muscular disorder.
- (7) Upanah of kapha vata shamak dravya also helpful in treating the carpal tunnel syndrome.
- (8) Aavaran chikitsa includes the treatment of kapha avarat vata chikitsa by using katu, amal, lavan ushan dravya prayog, fasting, physical activity following the principle of kaphnasak and vatanuloman activity.
- (9) Parishek chikitsa with prasarianiyadi kashaya.
- (10) Taila dhara with dhanwantar taila, pind taila.
- (11) Nasya –Brmhana, shodan nasya with vata kapha shamak dravya.
- (12) Rasayan also used in the management of CTS like sheelajatu, bala rasayan.

4 CONCLUSION

Carpal tunnel syndrome is a disorder of peripheral nerve and can be understood as kapha vataja vyadhi occur due to the dysfunction of vyana vayu. Now a days CTS is a common pathology affecting large number of people. Most of the diseases which are having poor prognosis by allopathic treatment have hope in Ayurveda. In early stages of CTS use of analgesics, corticosteroid injections help in reducing pain but on other hand leading to so many side effects and only provide temporary relief so the use of various ayurvedic modalities along with the panch karma procedures are more beneficial in the management of carpal tunnel syndrome and gives significant relief from the symptoms of disease and also arrest the progress of disease to further advanced stage.

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