



MANAGEMENT OF CARPAL TUNNEL SYNDROME BY USING PRINCIPLES OF AYURVEDA

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ABSTRACT :

To Assess the effect of a *jaluokavacharan* (leach application) and *pinda taila avagah* (tub bath) along with internal medicines- *kaishor guggul*, *raktapaachak yoga*, and *vishtinduk vati*. In patients suffering from carpal tunnel syndrome.

Setting- outpatient clinic at D.Y. Patil Ayurvedic hospital, Nerul, Navi Mumbai and at M.A. Podar ayurvedic hospital, worli, Mumbai

Participants- Patients with symptoms of carpal tunnel syndrome for more than 3 months and aged over 18 years. Total 6 patients were selected for the study.

Intervention- *Jaluokavacharan* was done at the site proximal to carpal tunnel by 2 *jaluoka* (leach) used at a time once in week for total 8 weeks + *Pinda taila avagaah sweda* (steam) daily for 2 times over a period of 8 weeks + internal medicines *Kaishor Guggul* 500 mg, *vishtinduk vati* 500 mg, *raktapaachak yoga* 500 mg. all medicines 3 times in a day with lukewarm water.

Main outcome measures- Participants were scored as having improved or not improved. improved was defined as no symptoms or minor symptoms requiring no further treatment. Non improved was defined as persistence of the symptoms after the treatment.

Key words: carpal tunnel syndrome, *vaatrakta*, *jaluokavacharan*, *pinda taila avagaah*, internal medicines

INTRODUCTION: Carpal tunnel syndrome is most common cause of entrapment neuropathy. The main symptom is acroparasthesia at night occurring in distribution of median nerve but may spread up to involve the arm.. acroparasthesia is marked by attacks of tingling, numbness, and stiffness sometimes pin and needle sensation, burning sensation seen chiefly in the fingers, hands and forearm region. Symptom usually appear at night (2-4 am) and may wake up the patient from sleep. Patients usually shake the hands to get

relief. Most patients are not able to realize that paraesthesia is only in the median territory and say the whole hand tingles.

On examination sensory loss is in the median territory usually involving only the fingers. The abductor policis power is weak. Wasting if it occurs, is in the outer half of the thenar eminence

Commonest cause of carpal tunnel syndrome is rheumatoid arthritis or more often a non specific synovitis. It may be more common in persons who are constantly using hand in one position like

hair dressors, gardeners. It is more common in females.

Treatment in the modern science is only use of anti inflammatory drugs and diuretics. This may help in mild cases, with no signs or only mild sensory loss, but if motor defect is clear or if the patient has resistant symptoms surgery to decompress the carpal tunnel remains the only modality. therefore there is great limitation for the treatment of carpal tunnel syndrome. Even if after decompression surgery symptoms may persists for prolonged period or there are chances of the recurrence of the symptoms. therefore it requires some alternative therapy which can cure the syndrome with minimum intervention and hence ayurvedic principles and management play vital role for the treatment of carpal tunnel syndrome. (1)

MATERIALS & METHODS:

Patients were selected from outpatient clinic at D.Y. Patil Ayurvedic hospital, Nerul, Navi Mumbai and at M.A. Podar ayurvedic hospital, worli, Mumbai who are having symptoms of carpal tunnel syndrome for more than 3 months and aged over 18 years.

STUDY DESIGN:

Jaluokavacharan: Jaluokavacharan was done at the site proximal to carpal tunnel by 2 *jaluoka* (leach) used at a time once in week for total 8 weeks

Avagaah sweda: Pinda taila avagaah *sweda* (steam) daily for 2 times over a period of 8 weeks

Internal medicines: Kaishor Guggul 500 mg, vishtinduk vati 500 mg, raktapaachak yoga 500 mg. all medicines 1tab TDS in a day with lukewarm water.

Gradation of the symptoms were done on the following basis

1. Daha :

- 0 No burning sensation
- 1- Invovment of only finger region
- 2- Involvement of fingure alongwith palm region
- 3- Involvement of entire hand region alongwith forearm region.

2 Ruja- (based on vas scale):

- 0- No pain
- 1- Mild pain
- 2- Moderate
- 3- Severe pain

3 Toda:

- 0 No burning sensation
- 1 Invovment of only finger region.
- 2 Involvement of fingure alongwith palm region
- 3 Involvement of entire hand region alongwith forearm region.

4 Aakunchana

- 0 - No aakunchana
- 1- Mild aakunchana
- 2- Moderate aakunchana
- 3- Severe aakunchana

STATISTICAL ANALYSIS: The above parameters were tested using the Wilcoxon signed rank test as there were gradations involved

Carpal tunnel anatomy: In the human body, the carpal tunnel or carpal canal is the passageway on the palmer side of the wrist that connects the forearm to the middle compartment of the deep plane of the palm. the tunnel consists of the bones and connective tissue. several tendons and median nerve pass through it.

The canal is narrow and when any of the nine long long flexor tendons passing through it gets swell or degenerate, the narrowing of the canal often results in the median nerve which is being entrapped or compressed. Movement in the wrist affects the shape and width of the carpal tunnel. The width decreases considerably during

normal range of motion in the wrist.(2)All the symptoms of carpal tunnel syndrome can be well correlated with symptoms of *vaatrakta*.

The principal site of *vaatrakta vyadhi* is करौ i.e. both hands predominantly ----

(3)

Symptoms develop in *vaatrakta* are- and carpal tunnel corellate very identically.

Patient complains of दाहं i.e. burning sensation in the hand, रुक् i.e. intense pain,

आयाम i.e. stiffness at affected site and तोद i.e. tingling and pin pricking

like sensation at hand region. Sometimes patient show sign of आकुंचने i.e.

contraction or wasting of the muscles. (4)

This sign is seen in those muscles which are supplied by the median nerve.

So all the symptoms that are described in *uttan vaatrakta* and carpal tunnel syndrome match very well clinically.

DISCUSSION:Treatment

of *vaatrakta*,The main line of treatment in *vaatrakta* is *raktamokshan*.(5)

(bloodletting) In case of carpal tunnel

syndrome, type of *raktamokshan* used was *jaluokavacharan*.(6) when these *jaluoka*

were applied over the site just proximal to carpal tunnel it relieves pain , tingling like

sensation , burning sensation , pin pricking sensation considerably.these *jaluoka* were

applied over the site of flexor retinaculum band at the carpal tunnel. 2 *jaluoka* were

applied at a time. This procedure was carried out for next consecutive weeks

(once in week) for upto total 8 weeks.

The second line of treatment was *Avagaah sweda* (7) with *pinda taila* (9) . As

mentioned in shloka given in *vaatrakta chikitsa*, *abhyanga* and *avagaah* with oil i.e.*sneha* is considered as one of the good

remedy for the treatment of *vaatrakta*. And

for this we have used *pinda taila* for the *avagaah sweda* . one important quality of *pinda taila* is *rujapaham* i.e. it relieves pain

in the *vaatrakta*. *Avagaah sweda* was given daily 2 times in a day except on the day

and next day after *jaluokavacharan*. Because after *jaluokavacharan* there was

little development of wound and blood flows from that site for a period of 12-24

hours ,hence *pinda taila avagaah* was stopped on that 2 days. For *avagah sweda* ,

pinda taila was heated upto 50 c and then it was poured in a vessel in which affected

hand was immersed for a period of 20 minutes.Alongwith *jaluokavacharan* and

pinda taila avagaah , internal medicines were given to the patient. They were

kaishor guggul, *vishtinduk vati*, and *raktapaachak yoga* each in a dose of 500

mg three times a day with lukewarm water.

Role of *kaishor guggul*: *Kaishor guggul* mainly contains *Amruta* i.e. *guduchi*.

Rogadhikaar of *guduchi* is *वातास्त्ररोगे* (8). hence it is specifically useful in the disease

of *vaatrakta*. In *kaishor guggul* alongwith *guduchi* other contents are *triphala*,

tryushan i.e.*trikatu*,*vidanga*,*danti*, and *nishottar*. *Guggul* is having *yogvaahitwa*

guna so it enhances the properties of *guduchi*.and rest other drugs do the *lekhan*

karma . that action is useful for relieving the pressure over the median nerve created

by the flexor retinaculum. Therefore it relieves pain ,tingling and pin pricking

sensation in patients suffering from carpal tunnel syndrome.

Role of *vishtinduka vati* : Main content of *vishtinduk vati* is *kupilu* i.e. *kaaraskar*.

Main action of this drug is *vaatshaman*,*vedanasthapan*, *uttejak*,

naadibalya, *shulaprashaman*, & *shothahara*.(10) In carpal tunnel syndrome

because of constriction created by flexor retinaculum over the median nerve all symptoms do get occurred. So to relieve this symptom kaarskar is very much useful by all its properties mention above.

Role of raktapaachaka yoga: Sira & Kandara are upadhatus of rakta dhatu.(11) Therefore those drugs which are acting upon the rakta dhatu will also act on kandara. Flexor retinaculum is tendon which is correlated with kandara. So this

drug will try to reduce inflammation developed in flexor retinaculum. Contents of raktapaachaka yoga are patola, saariva, musta, paatha and kutaki. All this drugs are acting on the raktadhatu & hence will also act on rakta upadhatu.& will try to do paachan of vitiated doshas in kandara.

This regimen was examined on total 6 patients having symptoms of carpal tunnel syndrome.all patients show marked improvement in the relief of symptoms.

patient name	Daha (Burning)		Ruja (Pain)		Toda (Tingling)		Aakunchana	
	BT	AT	BT	AT	BT	AT	BT	AT
A	3	1	3	1	3	1	1	0
B	3	0	2	0	3	0	2	1
C	2	0	3	1	2	1	1	1
D	3	1	3	1	3	1	2	1
E	2	0	2	0	3	1	1	0
F	3	1	3	0	2	0	1	0

BT= BEFORE TREATMENT, AT= AFTER TREATMENT

STATISTICAL ANALYSIS:

Parameters	W / t+	T-	P- value	Significance
Ruja	18	0	0.0414	Significant
Daha	21	0	0.0313	Significant
Toda	21	0	0.0313	Significant
Aakunchana	15	0	0.0625	Not Significant

The above parameters were tested using the Wilcoxon signed rank test as there were gradations involved.parameters of Ruja, Daha, Toda was found to be significant, The parameter Aakunchana was found to be non-significant as the sample size was too small.

RESULT: At the end of 2 months of treatment with jaluokavacharan, pinda taila avagaah, and internal medicines , patients shows marked improvement in symptoms with decrease in parasthesia, and decrease in pain on affected side, decrease in

burning sensation, reduction in stiffness & wasting of muscles.

CONCLUSION:All the 6 patients who are treated with above line of treatment show marked improvement in the symptoms. Symptoms Ruja, daha, Toda, & Aakunchana show significant reduction in the gradations. These symptoms get reduced after starting the treatment. & patient were having symptomatically relief in the disease. & there was no need to do any surgical intervention to relieve the symptoms.So this regimen should be considered as a good alternative &

conservative management of carpal tunnel syndrome. Though this treatment was carried out on only 6 patients, large number of sample size is necessary which is the scope of new research.

REFERANCES:

- 1.Siddhardh shah/ anupam Dasgupta, API Text book of Medicine, neurology-peripheral neuropathy, P 890, 7 th edition, Association of physicians of india, Mumbai 2003.
- 2.Asim kumar datta essentialls of human anatomy, part III,P19,current books international publisher, 3rd edition 2014.
- 3.Siddhinandan mishra, charaksamhita, chikitsasthan, (29/12), P 775, vol II,Chaukhambha orientalia, varanasi 2012
- 4.Siddhinandan mishra, charaksamhita, chikitsasthan, (29/20), P 776, vol II,Chaukhambha orientalia, varanasi 2012
- 5.Siddhinandan mishra, charaksamhita, chikitsasthan, (29/36), P 780, vol II,Chaukhambha orientalia, varanasi 2012
- 6.Siddhinandan mishra, charaksamhita, chikitsasthan, (29/37), P 780, vol II,Chaukhambha orientalia, varanasi 2012

- 7.Siddhinandan mishra, charaksamhita, chikitsasthan, (29/43), P 781, vol II, Chaukhambha orientalia, varanasi 2012
- 8.Ganesh krushna garde, sathr vaagbhat Ashtang hrudayam, uttarstaan,P490, raghuvanshi prakashan, 8th edition 1996.
- 9.Siddhinandan mishra, charaksamhita, chikitsasthan,(29/123),P793,volII,Chaukhambha orientalia, varanasi 2012
- 10.Gyanendra pandey,dravyaguna vijnana, part II, P 337,338, krishnadas academy 2014
- 11.Kashinath shastri gangasahay pandeya, charaksamhita, sutrasthan, (15/17), p 381, vol II, chaukhambha prakashan, varanasi 2012

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