ISSN: 2322 - 0902 (P)
ISSN: 2322 - 0910 (O)

International Journal of Ayurveda and Pharma Research

Case Study

EFFECT OF *AGNIKARMA* WITH *TAPTA GUDA* IN CARPAL TUNNEL SYNDROME - A CASE STUDY

Chahna VC[1]*, Sreelekha M.P[2], M.S Deepa[3]

*[1]PG Scholar, [2]Assistant Professor, [3]Associate Professor, Department of Shalya tantra, Govt. Ayurveda College, Thiruvananthapuram, Kerala, India.

Article info

Article History:

Received: 20-08-2022

Revised: 11-09-2022

Accepted: 23-09-2022

KEYWORDS:

Agnikarma, *Manibandha Sanayugata vata*, *Tapta guda*, Carpal tunnel syndrome.

ABSTRACT

Carpal tunnel syndrome (CTS) is the most common entrapment neuropathy of upper extremity. It affects approximately 3% of the general adult population in the world. Women are three times more likely to have CTS than men. In conventional system, medications such as corticosteroids, Non-Steroidal anti-inflammatory drugs, etc., are used in management of carpal tunnel syndrome. Surgical decompression of carpal tunnel is the main stay of treatment for CTS. The structures involved in carpal tunnel is mainly the tendons, ligaments and nerves which can closely related with *Snayu*, thus Carpal tunnel syndrome can be correlated with *Snayugata vata* affecting *Manibandhasandhi*. *Dahanopkarana* used for *Vatavyadi* affecting *Snayu*, *Sandhi*, *Asthi* are *Kshaudra*, *Guda*, *Sneha*. *Agnikarma* with *Snigdha dravyas* have more penetrating capacity than *Rooksha dravyas* like *Shalaka*. So, *Taptaguda* is taken in the present study to assess the effect of *Agnikarma* in carpal tunnel syndrome. Here the patient was treated with *Agnikarma* using *Taptaguda* over the most painful and tender points. Assessments were done before treatment, after treatment, 7th day, 15th day and 30th day. The result showed *Agnikarma* with *Taptha guda* was effective in treating Carpal tunnel syndrome.

INTRODUCTION

Carpal Tunnel Syndrome (CTS) is the utmost common compressive central mono-neuropathy seen in medical practice, accounting for 90% of all neuropathies. Clinical symptoms comprise of pain, paraesthesia, and numbness associated with local compression of the median nerve at the wrist, subsequently resulting in mechanical compression or local ischemia. Several factors can cause CTS, including the anatomy of wrist, certain health problems and congestion of hand. Appropriate treatment typically can relieve the symptoms and re-establish normal function of the hand.

Patient Information: A 48 year old female patient visited OPD of Department of Salyatantra, Government Ayurveda college, Trivandrum with complaints of pain and paraesthesia over right wrist and palm.

Access this article online

Quick Response Code

https://doi.org/10.47070/ijapr.v10i9.2545

As Phalen's test was positive, she was advised to do NCS for further confirmation and she was diagnosed with CTS over right hand. Internal medicines were given but didn't get much relief. *Agnikarma* procedure was explained in detail and her consent was taken for doing the procedure.

Treatment Given

Pre-operative Procedure

Detailed clinical examination, laboratory investigations (Blood Routine, FBS, PPBS, RA, CRP) and radiological tests (to rule out previous fractures) was done and data was recorded. Patient was informed in detail about the treatment procedure and informed consent was obtained.

Materials Required

- Betadine swab, Artery forceps, Sterile cotton, kidney tray, sterile bowl, Gas stove, Borosil pipette, *Guda*, *Madhu, Ghrita*, sterile gloves, surgical drape.
- The patient is allowed to lie in supine position comfortably. The affected wrist and surrounding area were cleaned with betadine swab and allowed to dry.

Operative Procedure

A 15gm of *Guda* is taken in sterile bowl and heated over stove till it melted completely. Then it was taken with the help of borosil pipette and 20 drops were dropped in the predetermined sites. (*Bindhu* type) Approximately 1cm gaping is maintained between each drop. On cooling, it was carefully wiped off using sterile cotton.

Post-Operative Procedure

Mixture of equal quantity of *Madhu* and *Ghrita* was then applied over the site after *Agnikarma*. Patient was observed for 30min for any increase of pain and paraesthesia. She was advised to continue the application of *Madhu* and *Ghrita* till the wound healing. Periodical observation was done after the procedure, 7th, 15th day after *Agnikarma*. Follow up was done on 30th day.

Fig no. 1 Heating *Guda*

Fig no. 2 Treatment done

Outcome Measurements

Pain – Assessed by Visual Analogue Scale

0	Nil
1-3	Mild
4-6	Moderate
7 and above	Severe

Paraesthesia

Grade 0	No Paraesthesia
Grade 1	Paraesthesia reduced
Grade 2	Paraesthesia present
Grade 3	Paraesthesia increased

Bostons questionnaire for CTS

Nerve conduction study

OBSERVATION AND RESULT

Clinical Assessments

Assessment Criteria	Before Rx	After Rx – 0th day	7th day	15th day	30th day
Pain	6	3	2	1	1
Paraesthesia	2	1	1	1	1
Tinel's Sign	Positive	Negative	Negative	Negative	Negative
Phalen's test	Positive	Negative	Negative	Negative	Negative

Boston's Questionnaire

	Before Rx	After Rx
Writing	3	1
Buttoning cloths	3	1
Holding books	2	1
Gripping of telephone reciever	2	1
Opening jars	3	1
Carrying grocery items	4	1

Motor Nerve Conduction study

	Site	Lat (m/s)	Lat (m/s)	Dur (m/s)	Amp	Area	Segment	Diff (m/s)	Dist (mm)	NCV (m/s)
BT	Wrist	9.58	24.69	15.10	3.1mV	12.0mVmS	Wrist – Elbow	4.80	230	47.92
AT	Wrist	6.98	24.38	17.40	1.4mV	7.4mVmS	Wrist – Elbow	4.27	230	53.86

DISCUSSION

Carpal tunnel syndrome is a common condition among middle aged people. CTS is due to an entrapment of the median nerve in the carpal tunnel at the wrist. The patient complained of pain in the hand, paraesthesia, and tingling in the distribution of the median nerve. These sensations may be felt in the thumb, index finger, middle finger, and the radial side of the ring finger. It is clinically diagnosed with the help of Phalen's test, Tinel's sign and Nerve Conduction study.

Pain: Before the treatment pain score was 6 and after the treatment pain score reduced to 3 and by 7th, 15th and 30th day pain score was 2, 1, 1 respectively. Thus instant relief in pain shows the immediate effect of treatment.

Paraesthesia– Before treatment paraesthesia was one among the main complaint of the patient which got significantly reduced after the treatment.

Tinel's sign and Phalen's test: Before treatment both tests was positive and immediately after the treatment both tests become negative which sustained throughout the study period.

Boston Carpal Tunnel Syndrome Questionnaire: This questionnaire was included in the study for assessment of quality of life of the patient. After the treatment, there was an overall improvement in quality of life of patients.

Motor nerve conduction study– Before the treatment latency period was 9.58m/s and after the treatment latency period reduced to 6.98m/s.

Nerve conduction velocity before the treatment was 47.92m/s and after the treatment velocity increased to 53.86m/s.

Probable Action of *Agnikarma*

Due to exertion and repeated movements of wrist, *Sopha* develops (inflammation of tendon) and also *Vata* may undergo *Dusti* and takes *Sthanasamsarya* in *Snayu* near *Manibandha sandhi* leading to *Manibandhasritha snayugata vata*. This may be associated with or without involvement of *Kapha*.

Due to *Ushna Tikshna*, *Sukshma*, *Ashukari Guna* of *Agni*, it gives good results in *Vatakaphaja* diseases. In present study *Tapta Guda* is taken for *Agnikarma*. The heat which is transferred to *Twak*, removes the *Srotavarodha*, and also pacify the vitiated *Vata* and *Kapha*. It increases the blood circulation to the affected site. More blood circulation flushes away the pain producing substances (P substances) and patient gets relief from symptoms.

Agnikarma using *Tapta Guda* like substances is considered to aid the penetration of heat through *Sukshma Sira* when compared to *Rooksha dravyas*

CONCLUSION

Agnikarma using *Tapta guda* is found to be effective in carpal tunnel syndrome. The treatment is effective in relieving pain and paraesthesia.

REFERENCES

1. Pratik D. Gadkari, Girish D. Dahikar, Rajendra O. Ganjiwale. A Review on Carpal Tunnel Syndrome. Research J. Pharm. and Tech. 2020; 13(10): 4961-4965. doi: 10.5958/0974-360X.2020.00870.7 2.
2. Prasanth K S et al: A Comparative Study of Agnikarma with Tapta Kshaudra and Panchadhatu Shalaka in Carpal Tunnel Syndrome: IJAAR Volume III Issue III Jul-Aug 2017 Page No:677-683
3. Acharya Susrutha, Susrutha Samhitha with English Translation of text and Dalhana's Commentary, Agnikarmavidhi adhyayam, edited by Prof. K.R.Srikantha Murthy, Chowkhamba orientalia, Varanasi, Reprint2012. Vol.I
4. Acharya Vagbhata, Ashtanga Hridaya with English translation, Kshara agnikarma vidhi adhyayam, edited by Prof. K.R. Srikantha Murthy, chowkhamba Orientalia, Varanasi, Reprint ed.2012.
5. Agnivesa, Charaka Samhitha redacted by Charaka and Dridabala with Ayurveda Deepika commentary by Chakrapanidatta, Vatavyadhi chikitisa, edited by R.K. Sharma and Vaidya Bhagvan Dash, Chowkhamba Sanskrit series, Varanasi, Reprint 2010.
6. Dr. Rabinarayan Tripathy, Dr. Shaithya Raj, Dr. Rajeshwari, P. N., Dr. Athulya and Dr. Lakshmy C. Senan.- A review on action of Agnikarma, research article published on 15th June 2016 by International Journal of Current Research
7. Bailey and love's Short practice of surgery, edited by Norman s Williams Christopher J.K Bulstrode, P Ronan O' Connell, 26th Edition, Published by CRC Press in 2013, Chapter Upper limb – Pathology Assessment and management.

Cite this article as:
Chahna VC, Sreelekha M.P, M.S Deepa. Effect of Agnikarma with Tapta Guda in Carpal Tunnel Syndrome - A Case Study. International Journal of Ayurveda and Pharma Research. 2022;10(9):43-45.
https://doi.org/10.47070/ijapr.v10i9.2545
Source of support: Nil, Conflict of interest: None Declared

***Address for correspondence**
Dr. Chahna VC
PG Scholar,
Department of Shalyatantra,
Govt. Ayurveda Collage, Trivandrum.
Email: chahnavc2020@gmail.com
Ph.no: 9497461729