

EFFECT OF AGNIKARMA ON DE - QUERVAIN'S TENOSYNOVITIS A CASE STUDY

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ABSTRACT:-

Objective

This case study was conducted to evaluate the conservative management of a patient presenting with right sided wrist and thumb pain diagnosed as De Quervain's tenosynovitis/tendinopathy with Agnikarma, Dashangalepa and Kaishora guggulu.

Clinical features

A 49-year-old female house wife with right-sided De Quervain's tenosynovitis/tendinopathy that began after a long periods of house hold activities like squeezing of clothes, cutting vegetables and during cooking.

Intervention and outcome

Treatment included Agnikarma 2 sittings with a gap of one week, Dashangalepa for external application on effected site and Kaishora guggulu twice a day after food for 15 days. Home advice included rest, elevation and eccentric rehabilitation exercises. The positive outcome was a complete resolution of the patient's complaint.

Key Words: De-Quervain's tenosynovitis, Agnikarma, Snayugata Vata, Dashangalepa,Kaishora guggulu

INTRODUCTION:-

Fritz de Quervain first described De Quervain's tenosynovitis in 1895.^{1,2} De Quervain's disease is described as painful stenosing tenosynovitis of the

first dorsal compartment of the hand.^{3,4} It is usually caused by overuse or an increase in repetitive activity, resulting in shear microtrauma from repetitive gliding of the first dorsal

compartment tendons (abductor pollicis longus or APL, and extensor pollicis brevis or EPB) beneath the sheath of the first compartment over the styloid of the radius leading to thickening of the extensor retinaculum of the wrist (and not related to inflammation as was once thought).^{2,3,5}

On the basis of its sign and symptoms, De Quervain's tenosynovitis can be correlated with the condition of *Snayugata Vata (S. Vata)* described in Ayurveda. *Snayugata Vata* is developed when the *vata dosha* aggravates due to *atichesta, ativyayam*, etc.⁶ and gets localized in *snayu* of *mani bandha sandhi*. The *vayu* responsible for this function, that is, *vyanvayu* is ultimately unable to carry out the function of *manibandha sandhi* (wrist joint) and thumb smoothly. The features such as pain, stiffness, restricted movement, etc., develop in this region.

Sushruta known as father of surgery has described various surgical procedures along with some para-surgical measures. 'Agni karma' is one amongst these parasurgical procedures. In Agnikarma therapeutic burning with special tools are done on specific sites.

Agnikarma has been given special place in surgery by Sushruta and it is believed that disease treated by Agnikarma never reoccurs. It is one of the treatment modality used in certain parts of the world. In modern time also it is used and it is termed as therapeutic burns or cauterization..

Sushruta indicated 'Agni karma' in various disorders of skin, muscles, vessels, ligaments joints and bones. He has also explained that the diseases treated with Agni karma modality don't reoccur. The approach of Agni karma has been mentioned in the context of diseases like Arsha, Arbuda, Bhagandar, Sira, Snayu, Asthi, Sandhigata Vata Vikaras and Gridhrasi.⁷ In Agnikarma therapy part or tissue is burned with the help of various special materials. It can be correlated with modern therapeutic cauterization.

Indications

A number of diseases and conditions have been explained in texts where agnikarma is indicated as therapeutic measure. Around 50 diseases have been mentioned where agnikarma can be performed. Few are Apachi, Granthi,

Arbuda, Antravidhi, Shlipada, Nadivrana, Upadamsa, Gulma, Shiroroga, Vataj shiroroga, Kaphaj shiroroga etc.

Pre-operative Measures - Before going for agnikarma proper assessment should be made. Instruments required for agnikarma like pippali, shalaka and plota, pichu, grita, madu, source of Agni should be kept ready. Patient should be empty stomach in cases like obstructed labour, urolithiasis, fistula, in different abdominal diseases, piles and diseases of oral cavity. Pichhila anna should be given before the procedure in all the other conditions.

Operative - Before performing Agnikarma chanting of mantras should be done. Minutely examine the site where agnikarma has to be performed. Proper cleaning of the area should be done. Agnikarma is performed at the site until samyak dagdha lakshana appears.

Post Operative Measures - Gritha and madhu should be applied over the wound for proper healing. After agnikarma proper diet should be taken.

Contra Indication for agnikarma

Agnikarma should not be done in following conditions-

- Unsuitable in PittaPrakriti, Sharada and Grishma ritu, in children, in aged person.
- Unsuitable in persons who are lean and thin, coward etc.
- It is contraindicated in pregnancy, internal bleeding, bleeding disorders, perforation, retained foreign body, etc.

Agni karma kala⁸

According to Acharya Sushruta, Agni karma can be done in all seasons, except Sharad ritu (autumn) and Grishma ritu (summer). It is because in Sharad season there is a Prakopa of pitta and Agni karma also aggravates Pitta which may lead to Pitta prakopa, leading to production of various disorders due to vitiated Pitta. Agnikarma is contraindicated in Grishma ritu as it is the hot season which will again cause Pitta aggrivation. But in emergency, Agni karma can be done in any seasons.

Importance of Agni karma⁹

Acharya Sushrut and Acharya Vagbhatta have both given superior place to Agnikarma as compared to Ksharakarma

among Dahana kriyas used for treatment of various diseases as in cases treated with Agnikarma, chances of recurrence are not present. It is suppose to have effect of sterilization. It causes coagulation and closure of bleeding vessels and thus helps in haemostasis. Agnikarma eradicates disease from its root and so considered to be superior. It shows shamaka effects on both Vata and Kapha doshas.

Patients usually present complaining of radial wrist pain with thumb movements and tenderness over the first dorsal compartment. Diagnosis is usually concluded by a positive Finkelstein's test (which causes a reproduction of pain at the radial styloid), as well as the presence of a tender nodule over the radial styloid.²⁻⁴ Finkelstein's test was first described in 1930 and has recently been described as being performed in four stages: first with the application of gravity assisted gentle active ulnar deviation at the wrist, then the patient actively deviates the wrist in an ulnar direction, then further passive ulnar deviation by the examiner, and in the

final stage, the examiner passively flexes the thumb into the palm.⁵⁻¹⁰

The reliability, validity, specificity and sensitivity of this test has not been reported, but authors have claimed that the staged method of testing may be more accurate with higher sensitivity and specificity.⁵ It has also been suggested that a patient must have pain four days out of seven. Other tests are indicative of this condition, including a decrease in pinch and thumb strength measurements on the symptomatic side, a decrease in thumb active range of motion bilaterally (but more pronounced on the symptomatic side), and the EPB entrapment test which has been shown to demonstrate subjects with a positive test were more likely having two compartments than one.¹¹⁻¹³

Repetitive work can cause pressure on the median nerve in locations other than the wrist and can also affect other nerves in the arm and hand. The branch of the median nerve that runs through the palm of the hand can be damaged directly by repeated pounding or by the use of certain tools requiring a strong grip using the palm, such as needle-

nosed pliers. The median nerve can also be pinched in the forearm.

CASE PRESENTATION:-

A 49-year-old right hand-dominant female, working full-time in home with complaints of radial side wrist pain for the past 4–6 weeks. She denied any history of trauma as well as any numbness or tingling. The patient stated that the pain is worse when she lifts up the children at home, and therefore, she is struggling to perform her required duties. She presents requesting treatment for this pain. The patient has tried utilizing over the counter anti-inflammatories intermittently, which have provided some relief. The remainder of her history was unremarkable.

On physical examination, she had swelling and tenderness to palpation in the region of the first dorsal compartment (Fig.1), and her Finkelstein's test was positive. The remainder of her examination was unremarkable including symmetric range of motion of her wrists bilaterally. After she was diagnosed with de Quervain's tenosynovitis, the patient was given

Ruksha Agnikarma in the following manner on 10-09-2018 and 18-09-2018, along with Dashangalepa for external application and Kaishora guggulu twice a day after food for 15 days and suggested follow up after 15 days

Sthana	Akruthi	Dravya
Over the right wrist joint (First Dorsal compartment)	Bindu - Dot like shape. According to Acharya Dalhana shalaka should be of pointed tip	Ruksha Agnikarma: performed by means of shalaka

After the treatment the patient was advised proper diet and was asked to come for next follow up after 15 days. After the first sitting of the Agnikarma the Patient got relieved from the symptoms and after second sitting she got completely relieved from the symptoms, during followup period also there was no complaints.

DISCUSSION:-

The Carpal Tunnel Syndrome (Manibandha Sandhi Sthita SnayugataVata) is produced by vitiated Vata Dosha with or without Anubandha of Kapha. So Agnikarma is considered as

the most preferred therapy to pacify these Dosha, by virtue of the properties that Agni possesses viz. Ushna, Tikshna, Sukshma, Ashukari Guna. These Guna are opposite to the properties of Vata and Kapha.

Possible mechanism of action:-

Agnikarma cures all the Vataja and Kaphaj disorders as Ushna guna of Agnikarma is opposite to that of Vata and Kapha doshas. According to Ayurveda, every Dhatu (tissue) have its own Dhatvagni and when it becomes low, diseases begins to manifest. In this condition, Agnikarma works by giving external heat there by increasing the Dhatvagni which helps to digest the aggravated doshas and hence cures the disease¹⁴. The local thermo therapy may increase tissue metabolism which may leads to excretion of the unwanted metabolites and toxins. Heat may stimulate lateral spinothalamic tract (SST) which leads stimulation of descending pain inhibitory fibres (DPI) which release of endogenous Opioid peptide which bind with opioid receptors at substantia gelatinosa rolandi which inhibit of release of P- substance (Pre-

synaptic inhibition) and blockade of transmission pain sensation occur.

CONCLUSION:-

Injuries of the hand and thumb can be challenging, since most patients frequently use them in their daily lives, thus delaying healing time.

Hence, this treatment modality can be prescribed as an clinical procedure considering its effectiveness and safe therapeutic regimen for De Quervain's tenosynovitis .

Agnikarma is also known to be effective in other cases of musculoskeletal disorders such as osteoarthritis, cervical spondylosis, lumbar spondylosis, sciatica, frozen shoulder, calcaneal spur, plantar fasciitis, carpal tunnel syndrome, trigger thumb, etc.

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