# Management of tennis elbow by Agnikarma

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# ABSTRACT

Tennis elbow is a painful condition and causes restricted movement of forearm which requires treatment for long period. Till date only symptomatic treatments are available like use of anti-inflammatory analgesic drugs, steroids injection, physiotherapy, exercise etc. But none of these provide satisfactory result. Long term use of anti-inflammatory, analgesic drugs and steroids injection is also not free from the adverse effects. Usually, 'wait-and-see policy' of treatment guideline is recommended in most of medical texts. According to Ayurveda, *snayugata vata* can be correlated with the condition of tennis elbow. Sushruta has advised *Agnikarma* for disorders of *snayu* (ligaments and tendons), *asthi* (bone), *siddhi* (joints) etc. Hence, in this study a case of tennis elbow (*snayugata vata*) was treated by *Agnikarma, along with administration of* powder of *Ashwagandha* and *Navajivana Rasa* orally, for a period of 03 weeks. This combination therapy provided considerable relief in pain and movement of the elbow joint.

Key words: Agnikarma, Ashwagandha, Navajivana Rasa, snayugata vata, tennis elbow

## **INTRODUCTION**

Tennis elbow is a painful disorder of the forearm; it may be developed due to non-specific inflammation at the origin of extensor muscles of the forearm.<sup>[1]</sup> It is clinically diagnosed by sensation of pain and tenderness at the lateral epicondyle of humerus which aggravates during the resisted dorsiflexion of the wrist and fingers.<sup>[1]</sup> The overall prevalence rate of tennis elbow (lateral epicondylitis) is of 1-3%.<sup>[2]</sup> The highest incidence is found in young age group and between the ages 40 and 60 years of life. For women, the incidence increases to 10% between the ages of 42 and 46 years.<sup>[3,4]</sup> But the general causes about manifestation of tennis elbow are the overuse of forearm/minor trauma/ non-recognized trauma,<sup>[5]</sup> weight lifting, etc. Previously, the disease was found in athletes especially in tennis player.<sup>[6]</sup>

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But in present day practice, it is known to affect painters, plumbers, carpenters, drivers, etc.<sup>[7]</sup> Research studies have shown that automobile workers, cooks, and even butchers get tennis elbow more often than rest of the population. The dominant arm is significantly more often affected than the non-dominant arm.

On the basis of its sign and symptoms, tennis elbow can be correlated with the condition of *Snayugata Vata (S. Vata)* described in Ayurveda. *S. Vata* is developed when the *vata dosha* aggravates due to *atichesta, ativyayam*, etc.<sup>[8]</sup> and gets localized in *snayu* of *kurpara sandhi*. The vayu responsible for this function, that is, *vyanvayu* is ultimately unable to carry out the function of *kurpara sandhi* (elbow joint) and *hasta pradesha* (forearm) smoothly. The features such as pain, stiffness, restricted movement, etc. develop in this region. These symptoms may also develop due to *kaphavritta vyana vayu*.<sup>[9]</sup> Hence, it is also considered an important causative factor for manifestation of *S. Vata*.

This is a self-limiting problem and recovery is seen in about 90% of cases within 1-2 years of conservative management,<sup>[10,11]</sup> whereas only in less than 10% of cases, surgery is indicated. In some cases, the problem may continue for longer period.<sup>[12]</sup> A wide range of symptomatic treatments are available such as use of anti-inflammatory analgesic drugs, steroids injection, physiotherapy, exercise, etc. which have their own limitations and adverse effects.<sup>[13]</sup> Long-term use of anti-inflammatory analgesic drugs and steroid injections are also not free from adverse effects. Till date, no satisfactory treatment is available for tennis elbow. In Ayurveda, *Acharya Sushruta* has advocated various treatment modalities such as *Snehana*, *Upanaha*, *Agnikarma*, and *Bandhana* for *S*. *Vata*.<sup>[14]</sup> Amongst these, *Agnikarma* seems to be more effective in providing distinct and instant relief. If it is done perfectly, disease does not reoccur.<sup>[15]</sup>

A single case study of tennis elbow is reported here in which vitiated *dosha* was pacified with the use of internal medication of *Asmagandha churna* and *Navajivana Rasa* (compound formulation) along with *Agnikarma*. After 3 weeks, patient got relief from pain, stiffness, and restricted movement of right hand and elbow joint.

#### **CASE REPORT**

A 38-year-old female patient of vata kaphaja prakriti visited asthi sandhi marmaghat Unit of Shalya Tantra Department on 6th March 2012 with complaints of shoola (severe pain), stambha (stiffness), restricted movement in lateral part of right karpura. Sandhi (elbow joint), and hasta, anguli paradesha (palm) for 08 months. There was no obvious history of trauma, except lifting of water bucket by the patient for house hold work. On examination, it was elicited that the patient was unable to hold the object properly by the affected hand and maximum tenderness was noticed at the lateral epicondylar region of humerus with no obvious swelling noticed at right elbow joint. Further, it was observed that on full extension of right elbow and resisted extension of right wrist joint, maximum pain was experienced by the patient. There was a history of treatment for tennis elbow under a private orthopedic surgeon for last 08 months with no significant relief. Routine blood investigations including RA (Rheumatoid arthritis) factor and X-ray examination of hand were done by the surgeon and all investigations were found within normal range. On the basis of these, the patient was diagnosed as a case of tennis elbow by the surgeon.

After careful assessment and examination, patient was treated with *Agnikarma* and oral medication of *Ashwagandha* powder 4 g, and *Navajivana* Rasa 250 mg, twice a day with luke warm water for 03 weeks. With this short duration of treatment protocol, patient got relief from pain and increased the strength of gripping power in affected hand without any untoward effect.

#### Procedure of Agnikarma

After taking written informed consent, *Agnikarma* was done. The affected part was applied with *Triphala Kasaya* and wiped up with sterilized gauze piece. *Agnikarma* in the form of *samyak twak dagdha* (therapeutic superficial skin burn) was done by making a *vilekha dahana vishesa* (multiple dots in a three straight lines) with red hot *pancha dhatu shalaka* [Figure 1] covering about 05 cm length with dotted spot of burn by sparing gap of 0.5 cm between two dots. Another two lines of the same *vilekha dahana vishesa* were made, 0.5 cm apart from and parallel to the first line. During entire procedure, a swab soaked in *Kumari Swarasa* (fresh pulp of *Aloe vera*) was applied just after making each dot. Appropriate precaution was taken not to produce *asamyak dagdha vrana* (neither superficial nor too deep burn). After completion of the procedure, wound was covered with *Haridra* powder dusting [Figure 2]. The entire procedure was repeated three times at the interval of 7 days. Patient was advised to apply the paste of *Haridra* powder mixed with coconut oil at bed time. *Vata vardhak ahara-vihar* (diet and activities which aggravate *vata dosha*) was also restricted during the treatment and follow-up period.

#### DISCUSSION

Tennis elbow can develop due to repeated injury and inflammation added with microscopic degenerative changes encountered at the origin point of tendon of extensor carpi radialis bravis muscle and it makes the movements of affected arm restricted and painful. As per Ayurvedic concept, this condition may develop with the vitiation of vata with anubandha of kapha dosha (one of the responsible factors for production of ama and srotovaigunya). Vata and kapha doshas have been considered the important factors for causation of shoth (inflammation) and shoola (pain) in the body. To treat such condition, Agnikarma chikitsa is indicated as a best treatment modality.<sup>[16]</sup> Therefore, to pacify the vitiated vata and kapha dosha, Agnikarma was done which helped to reduce the shoth and shoola by virtue of its opposite qualities such as *ushna* (hot), *tikshna* (sharp), sukshma (finest), and ashukari (quick acting).<sup>[17]</sup>

# Probable mode of action

In the process of *Agnikarma*, transferring of therapeutic heat to *twak dhatu* (skin) and gradually to deeper structure was done with the help of a red hot *panchadhatu shalaka* (innovation of Prof. P. D. Gupta) which would have



Figure 1: Procedure of Agnikarma



Figure 2: Post-Agnikarma

acted eventually to pacify *ama dosha* and *srotovaigunya* and consequently rendered relief in symptoms of *shoth* and *shoola*. Concomitantly administered oral drugs of *Ashwagandha* 4 gm and *Navajivana Rasa* 250 mg along with lukewarm water for 3 weeks might have played role with *Agnikarma* to pacify the *dosha* and related pathogenesis to achieve the desired result. Here, the role of internal medication can be elaborated by considering the pharmacological properties of the drugs used. *Aswagandha*<sup>[18,19]</sup> and *Navajivana Rasa*<sup>[20]</sup> are known to exhibit *vata kapha shamak*, *shothahara* (anti-inflammatory), *vedana sthapan* (analgesic), and *rasayana* (immune modulator and anti-oxidant) effect.

Superficial multiple wounds produced by *Agnikarma* healed within 5-7 days. Patient visited for follow up for 1 month after completion of treatment. The scars of wound disappeared in due course of time (3-4 weeks) and there was no untoward effect noted. Patient was advised not to lift any heavy objects and perform any twisting movement for further 6 months.

#### CONCLUSION

Hence, this treatment modality can be prescribed as an office procedure considering its effectiveness and safe therapeutic regimen for Tennis elbow.

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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