



Management of Tennis Elbow Using Ayurvedic Parasurgical Techniques – A Case Report

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ABSTRACT

Tennis elbow, also known as lateral epicondylitis, develops 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. In present case report a 58-years-old male patient, occupation as a bus driver, presented with complaints of severe pain in lateral aspect of right elbow joint, aggravating while movements, and lifting weight and having restricted movements in right elbow joint for 1 year. The patient was managed with 5 sittings of Agnikarma and Viddhakarma with 1 week of interval. The pain was relieved after 3rd week while the restricted movements of the right arm were brought back to normal after 4th week. There was no recurrence till the end of 6th week.

KEYWORDS: Tennis elbow, Epicondylitis, Snayugata vata, Agnikarma, Viddhakarm

Received 18.01.2023

Revised 16.02.2023

Accepted 21.03.2023

INTRODUCTION

Tennis elbow, also known as lateral epicondylitis is commonly occurring musculoskeletal disorder affecting lateral aspect of elbow joint [1]. It commonly affects people in age group Between 40 to 60 years of life [2]. It is not only affecting the sports-persons but can affect farmers, carpenters, plumbers, painters, drivers, cooks etc [3]. Pain on torquing movements of forearm, or pain aggravating during resisted dorsiflexion of the wrist and fingers, tenderness at epicondylar region of humerus, are the cardinal signs and symptoms of tennis elbow [4]. The contemporary management includes use of NSAIDs, corticosteroids, surgery, percutaneous radiofrequency thermal lesioning, extracorporeal shock wave (ECSW) therapy, laser therapy, and localized injection of botulinum, platelet rich plasma etc., but all these are too expensive [5, 6]. As per the description in Ayurveda, *Snayugata Vata* exhibits the similar symptomatology to tennis elbow [7]. It is developed when the *Vatadosha* aggravates due to *Atichesta*, *Ativyayam*, *Abhighata* etc., and gets localized in *Snayu* of *Kurparasandhi* which results into *Shulamaakshpanam* (severe pain on movement), *Sthambha* (restricted movements) of the elbow joint [8]. The present case report highlights the effect of *Agnikarma* and *Viddhakarma* in a 58-years-old patient suffering from tennis elbow.

CASE REPORT

A 58-years-old male patient, occupation as a bus driver, presented with complaints of severe pain in lateral aspect of right elbow joint, aggravating while movements, and lifting weight. The patient was also having restricted movements in right elbow joint for 1 year. There was no any history of trauma except doing routine driving work. Patient was taking treatment frequently for the same since last 1year, with no significant relief. The patient had no history of systemic illness. All routine and associated blood investigations were within normal range.

On *Dashavidha pareeksha* (~tenfold examination), the patient's *Shariraprakriti* (~physical constitution) was *Vata-pittaja*, the *Manasa prakriti* (~mental constitution) was *Satva-rajaa*, the *Vikriti* was *Asthi-Sandhi-Snayugata*, the *Sara* (~the excellence of tissue elements) was *Asthisara*, the *Satmya* (~homologation) was *Sarvarasawhile* the *Samhanana* (~compactness of tissue or organs), *Pramana* (~anthropometry), *Vaya*

(~age), *Abhyavarana shakti*(~capacity of intake of food) and *jaranashakti*(~power of digestion) were *Madhyama*.

DIAGNOSTIC FOCUS AND ASSESSMENT

On examination, mild swelling at lateral epicondylar region was seen. On palpation, tenderness elicited over same area extending to dorsum of forearm. The patient was finding difficulties in holding the object properly with the affected hand. Additionally, it was found that the patient felt the most pain at complete extension of the right elbow and opposed extension of the right wrist joint. After taking overall history the patient was diagnosed as a case of Right-hand Tennis elbow (Right Lateral epicondylitis). X-ray of right elbow hand showed no significant changes with normal study. The Cozen test was performed to reach the final diagnosis [9]. The test was conducted in sitting position. The patient's right arm was extended, the forearm was pronated, and the wrist was slight radially deviated. The lateral epicondyle of the humerus was then palpated to determine where the extensor carpi radialis brevis muscle inserted. The patient was then instructed to make a fist and extend his wrist while resisting the pressure being applied. The patient suddenly began to experience elbow on the lateral side. The pain and movements were graded as per the criteria shown in table 1 and table 2.

Table 1: Pain assessment

GRADE	VAS SCALE	PAIN
0	0	NO PAIN
1	1 – 3	MILD PAIN
2	4 – 6	MODTRATE PAIN
3	7 – 10	SEVERE PAIN

Table 2: Mobility gradation chart

GRADE – 0	Normal movement with no pain.
GRADE – 1	Restriction of movement with mild pain
GRADE – 2	Restriction of movement with moderate pain.
GRADE – 3	Restriction of movement with severe pain.

TIMELINE

The detailed timeline of the treatment is described in table3.

THERAPEUTIC FOCUS AND INTERVENTION

The major focus was to relieve the pain and to restore normal function of affected arm. Considering Tennis elbow as *Snayugatavata*, the treatment emphasized on to pacify the vitiated *vata dosha*. After careful assessment and examination, patient was planned to treat with combined para surgical procedures, *Agnikarma* and *Viddhakarma*.

SOPs for *Agnikarma* -The affected part was cleaned with *Panchvalkal Kasaya* and wiped up with sterilized gauze piece. *Agnikarma* in the form of *Samyaktwakadagdha* was done by making a *Bindudahanavishesha* (multiple dots at maximum tender points) with red hot *Panchadhatushalaka* (Fig.1). After completion of the procedure, *Yashtimadhughrut* dusting was done on *dagdhavrana* [10, 11].

SOPs for *Viddhakarma* - Supine position given to patient with hand kept in semi flexed position. Site: 4 fingers above and below the Right Elbow joint. The site, 4 fingers above the elbow joint was cleaned with spirit swab and punctured with 26 no. (half inch) needle up to 10 mm deep on lateral aspect of right elbow joint (Fig-2). Needle withdrawn after few seconds and site cleaned with spirit swab. Same procedure of *Viddhakarma* repeated 4 fingers below the elbow joint [8].

These procedures *Agnikarma* followed by *Viddhakarma* was repeated at the interval of 1 week. The treatment was continued for 6 weeks.



Figure:1 *Agnikarma* at Right lateral epicondylar region.



Figure:2 *Viddhakarma* 4 fingers above Right elbow joint.

FOLLOW UP AND OUTCOME

After completion of 5 sittings of *Agnikarma* and *Viddhakarma* patient got complete relief. The pain was completely relieved and the elbow movements were also brought back to normal in 5 weeks of treatment as shown in table 4. But the treatment was continued in 6th week also to avoid recurrence. Patient visited after 3 months of treatment with no recurrence of symptoms.

OBSERVATION	Initial day	End of 1 st week	End of 2 nd week	End of 3 rd week	End of 4 th week	End of 5 th week
Pain	3	2	1	1	0	0
Mobility of right elbow joint	3	3	2	2	1	0

Table 4: Weekly improvement in pain and mobility of elbow joint.

DISCUSSION

The elbow joint comprises of three bones: Humerus, Ulna, and Radius. These bones are held together by several ligaments, muscles, and tendons. Tendons attach muscle to bone. The symptoms arises due to injury to tendons at the elbow joint [13]. The elbow tendons that are connected to the lateral epicondyle of the humerus, on the distal part of the bone, give rise to the forearm muscles [14]. The extensor carpi radialis bravis muscle tendon's origin site can experience tiny degenerative alterations that lead to tennis elbow, which limits the range of movements in the affected arm and causes pain [15]. As per ayurvedic concept this condition develops due to vitiation of *Vata* with *Kapha* in combination. To treat such conditions *Agnikarma* procedure is indicated as a best management. *Viddhakarma* procedure also helps to eliminate the vitiated *vata* dosha from affected site. Therefore, to pacify the vitiated *Vata* and *Kapha* dosha, *Agnikarma* and *Viddhakarma* procedures in combination works very effectively.

Probable mode of action of *Agnikarma*: In the process of *Agnikarma*, transferring of therapeutic heat to *Twaka dhatu* and gradually to deeper structure which would have acted eventually to

pacify *Vatadosha* and *Srotovairgunya* and consequently rendered relief in symptoms of *Shotha* and *Shoola* [16].

Probable mode of action of *Vidhakarma*: According to Acharya Sushruta all vitiated *Doshas* carried by *Sira*. After *Vidhakarma*, *Vata* being a *Laghu* and *Chala* property gets eliminated first. Hence there is pacification of *Vatadosha* and ultimately pain gets reduced [17].

CONCLUSION

Agnikarma and *Vidhakarma* both para-surgical procedures in combination are very effective to pacify *Vatadosha* and shown significant results in pain management of tennis elbow. Both these are OPD procedures, takes less time to perform, and very cost effective also. Hence, this combined management modality can be performed considering its effectiveness and safe therapeutic regimen for Tennis elbow. By this case report it can be concluded that *Agnikarma* and *Vidhakarma* in combination proved to be a great treatment option for the patient's suffering from Tennis elbow. These results can be further validated on large scale. This management in combination can also be tried in other painful musculoskeletal conditions specially *Vata* and *Kapha* dominant diseases, like Frozen shoulder, Sciatica, Lumbar spondylosis etc. as per sites mentioned by Acharya Sushruta.

DECLARATION OF THE PATIENT CONSENT

Authors certify that informed consent form has been taken for reporting the case with images and other clinical information in the journal. The patient is aware that while every attempt will be made to keep his identity a secret and initials will not be published but anonymity cannot be guaranteed.

FINANCIAL SUPPORT AND SPONSORSHIP: Nil

CONFLICT OF INTEREST: None

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CITATION OF THIS ARTICLE

Kavita Singh, Ajitkumar S. Wahane. Management of Tennis Elbow Using Ayurvedic Parasurgical Techniques – A Case Report . *Bull. Env.Pharmacol. Life Sci.*, Vol 12 [4] March 2023: 303-307