



“A Single Case Study To Evaluate The Efficacy Of Jalaukavcharan In Management Of Snayugat Vaata W.S.R.T. Tennis Elbow.

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ABSTRACT

Tennis elbow, also known as lateral epicondylitis and in ayurveda it can correlate with snayugat vaata, is a painful musculoskeletal disorder characterized by pain and tenderness over the lateral epicondyle due to repetitive strain and micro trauma of the extensor tendon origin. In Ayurveda, the clinical presentation of tennis elbow can be correlated with Snayugata Vata, where aggravated Vata Dosha localizes in the Snayu (tendons/ligaments) around the Kurpara Sandhi (elbow joint), producing pain, stiffness, tenderness, and restricted movements. Conventional management including analgesics, corticosteroid injections, and physiotherapy often provides static relief and may be associated with recurrence or adverse effects. Hence, there is a need for safe and effective alternative management. This single case study was conducted to evaluate the efficacy of Jalaukavacharana in the management of Snayugata Vata (tennis elbow).

A Patient having below complaints treated movements was treated with Jalaukavacharana at weekly intervals along with appropriate Ayurvedic supportive medicines. Assessment was carried out on the basis of subjective and objective parameters including pain score, tenderness, range of motion, and functional ability before and after treatment.

After completion of therapy, significant improvement was observed in pain, tenderness, grip strength, and range of motion, with marked reduction in difficulty during daily activities. The therapeutic effect be attributed to the anti-inflammatory, analgesic, anticoagulant, and microcirculatory enhancing properties of bioactive substances present in leech saliva such as hirudin and calin. From an

Ayurvedic perspective, Jalaukavacharana helps in removal of vitiated Rakta and pacification of aggravated Vata ,Pitta Dosha at the affected site.

INTRODUCTION

Tennis elbow is one of the painful condition which we can correlate with snayugat vaat according to ayurved.¹ The exact pathophysiology of the disease is unknown but inflammation of tendon or common extensor muscles can be seen. It occurs usually in middle age period. Modern medicine introduced many surgical as well as medicinal intervention to lessen the intensity of disorder, including intramuscular injections and steroid therapy orally. But all these intervention causes less effect or we can see relapse of condition after several period of time. So here role of ayurvedic management increases as we look to cure the disorder from its root.

Jalaukavcharn that is leech application is sort of raktamokshan which can help to reduce severity of disorder like tennis elbow by working on its root.² Jalaukavcharan can help to suppress the vitiated doshas like vata and pitta in snayugat vaat. So inflammation can be suppress here. Also it acts on removing inflammatory exudates from the site by its anti inflammatory action.³ Its chemical constituents can help to avoid relapse of this condition.

KEYWORDS - Tennis Elbow, Jalaukavcharan, Snayugat vaat, Lateral Epicondylitis.

MATERIAL AND METHODS

The patient was suffering from elbow pain, restricted elbow movements and tenderness at lateral epicondyle from last 7 months. He was registered for our present study in OPD and IPD of Shalya Tantra dept. of Csmss ayurved college and hospital. On the basis of signs and symptoms he was diagnosed as Lateral Epicondylitis or Tennis Elbow. The patient was treated with Leech Therapy along with conservative ayurvedic management for 11 /2 month. Leech therapy was done 7 times at the interval of 7 days.

Assessment Criteria

- **Subjective parameter**

1. PAIN

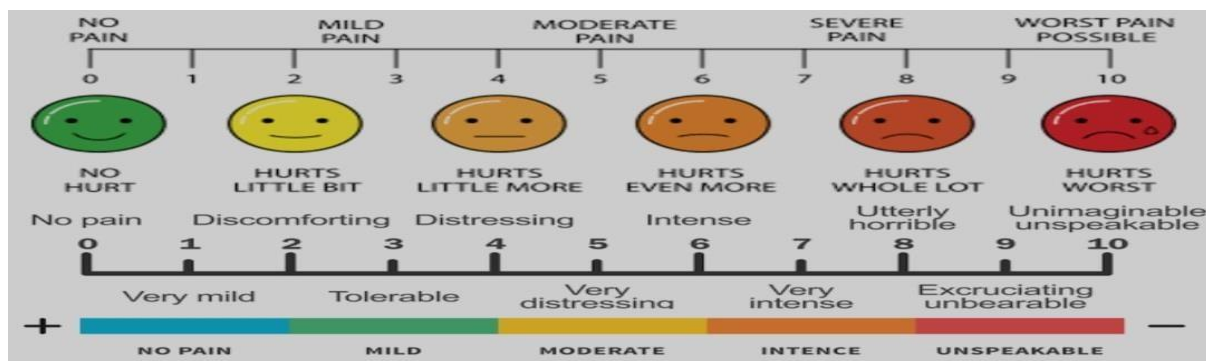


Table No. 1: Representing Grading of pain.

Explanation	Grade
No complaint of pain	0
Negligible/ tolerable pain.	1—3
Localized tolerable pain completely relived by hot fomentation	4—6
Intolerable pain, not completely relived by hot fomentation, have to take oral analgesic medication and no disturbance in sleep	7—8
Continuous and intolerable pain with sleep disturbance. Patient seek medical help as early as possible.	9—10

2. TENDERNESS

Table No. 2: representing Grading of Tenderness.

Explanation	Grade
No tenderness	0
The patient winces with pain	1
The patient winces with pain and withdraws the hand	2
The patient does not allow the elbow to be touched	3

- **Objective parameter**

3. RANGE OF MOTION

Range of motion was assessed on the basis of flexion and extension of the elbow and the degree of angle was measured with the help of Goniometer.

a. **Extension**

Table No. 3: representing Grading of Extension type of ROM.

Explanation	Grade
Less than or equal to 25 degree	0
Between 25-60 degree	1
Between 60- 90 degree	2
Between 90-120 degree	3
Between 120-150 degree	4

b. **Flexion**

Table No. 4: representing Grading of Flexion type of ROM.

Explanation	Grade
More than or equal to 150 degree	0
Between 120-150 degree	1
Between 90- 120 degree	2
Between 60-90 degree	3
Less than 60 degree	4

TREATMENT⁴

1. Nidana Parivarjana
2. Jalauka Avcharana/ Leech therapy
3. Shaman Chikitsa

• **Nidana Parivarjana**

Weight lifting

Playing Tennis or any other sports which includes wrist moment

Prevent elbow from trauma

Jalauka Avcharana/ Leech Therapy.⁵

7 sittings of Jalauka Avcharana karma was done at the interval of 7 days under the observation of experts. The Jalauka Avcharna Karma was done under 3 headings.

I) POORVA KARMA Jalauka Shodhana

The Jalauka was collected from pond and collected in a jar. Now this Jalauka was took out from the jar into a tray having turmeric water in it. Jalauka start moving into the tray. By this procedure the Jalauka got activated and hungry. After sometime the turmeric settles down into the base of tray and Jalauka Shodhana is said to be completed.

Part preparation of the site for the application of Jalauka is the Right elbow particularly the skin over the lateral epicondyle, which is also the most tender point. The part was cleaned with Savlon, Betadine or spirit.

Instruments

5 cc syringe for blood collection, Gauze pieces, Instrument tray, Kidney tray, Turmeric powder, A pair of sterile gloves, Distilled Water

ii) PRADHAN KARMA

Leech Application

The part of the elbow was cleaned as stated above. The Shodhit Jalauka was wrapped in a gauze piece and placed over the Lateral Epicondyle. Initially few drops of patient's blood was pour over the site to make the leech adherent over the point. After a few seconds Jalauka fixes its head and tail over the patient's elbow and attains Ashwakhurvati Position. The Jalauka was covered with sterile gauze pieces and drops of distilled water was pour over the Jalauka drop by drop. The Jalauka sucks the blood and slowly increases in the size.



Leech removal

Leech removal was done after 30 minutes from the Jalauka fixes its head. On 3rd and 5th sitting Jalauka leaves the skin by own its own while on the other sittings turmeric powder was pour over the head and sucker part of Jalauka to make it free from the skin.

iii) PASCHAAT KARMA Jalauka Vamana

Jalauka vamana is consider an important part as this may affects the life of Jalauka if done improperly. For the vamana we have poured dired turmeric power over the Jalauka. After few seconds Jalauka vomits out the whole blood. No need was felt to apply pressure for Vaman Karma.

Dressing of wound

The wound over the elbow of the patient was cleaned with betadine and dressed with turmeric powder. A tight bandaging was done to prevent further ozzing of blood from the elbow.

Shaman Chikitsa

1. Yograj Guggul 2 bd with warm water
2. Amruta Guggul 2 bd with warm water
3. Maharasnadi Kwath 2tsp bd with warm water
4. Nirgundi Tail for local application.

RESULTS**Table No. 5: Comparing the symptoms before after treatment of Tennis Elbow.**

Sr. No	Symptoms	BT	AT
1	Pain	9	3
2	Tenderness	3	1
3	ROM Flexion	2	1
4	ROM Extension	3	1

DISCUSSION

In tennis elbow fibers of extensor carpi radialis brevis got inflamed which causes pain at elbow joint. Weight lifting, extensive wrist movement, etc. causes workload over this muscle. It leads to acute inflammation at muscle insertion.⁶ With proper rest for 6 months to 1 year condition gets self limited. But as upper limbs are most used part so its impossible to give rest for such minor condition.

Modern science doesn't have proper universally accepted treatment regime for this condition. But ayurved possessed answers for such challenging problems of modern medical science. According to ayurved jalauka (leech) act to nullify pitta dosha. Pitta and rakta are considered as samadharmi. Along with these two vaat is also seen to be present as this condition corelated with snayugat vaat. In inflammatory conditions vaat,pitta and rakta consider to be involved. So according to this jalauka is useful in this condition.⁷

As per VAS scale pain score was 9 before treatment. After 1st setting of jalaukavcharan score became 8/10. After every sitting score tends to decrease. At final 7th setting it became 3/10.

Table No. 6: showing pain scoring on each therapy sitting.

Sitting of therapy	Pain score out of ten
First	8
Second	7
Third	7
Fourth	6
Fifth	4
Sixth	4
Seventh	3

It had been seen that pain, which is symptom of vitiated vaat dosha can be seen relieved at great extent. Also inflammation which is subjective of vitiated pitta and rakta can be seen nullified by jalaukavcharan⁸

Before treatment tenderness grading was 3 which mean patient doesn't allowed to touch for examination at shoulder joint. After 1st sitting score was still 3. But at the end of 7th sitting score became 1. Tenderness was because of accumulation of doshas. Jalauka sucks accumulated doshas from that site and that relieves tenderness. Compounds such as Histamine - like substances, Acetylcholine and Nitric Oxide Enhancers can improve local circulation, thus reducing pain associated with Ischemia. Hirudin Functions by preventing the formation of clots, which helps maintain capillary blood flow in an inflamed region.⁹

Range of Motion both Flexion & Extension had also improved due to lessen pain and stiffness over the elbow joint. Jalauka has been seen effective in avgaad (superficial) doshas. So it can be seen in this case as well.

We had got an extremely significant results from the jalaukavcharan on the Tennis Elbow. The main aim was to gain relief, returning to normal routine and minimal relapse of symptoms which was achieved. The improvement of the parameter was given mainly by the jalaukavcharan. However the internal medication given support to therapy, prevents the accumulation of doshas and helped in reoccurrence of the symptoms. So by this case study an attempt is made to provide a safe and effective treatment approach for Tennis Elbow.

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