

“A CLINICAL IMPORTANCE OF VALUKA SWEDA IN THE MANAGEMENT OF TENNIS ELBOW”

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ABSTRACT

Tennis Elbow encompasses lateral, medial and posterior Elbow symptoms. The one commonly encountered is the lateral Tennis Elbow which is known as Lateral Epicondylitis or Classical Tennis Elbow and there is pain and tenderness on the lateral side of the Elbow some well-defined and some vague, that results from repetitive stress. Other varieties encompass Medial Tennis Elbow known as Golfer's Elbow and Posterior Tennis Elbow around the margins of the Olecranon process. The clinical features comprises of Pain and Swelling in Elbow Joint and Difficulty in gripping objects and lifting them. Sports persons will also have difficulty in extending the elbow.

Recent statistical studies globally attribute 1% to 3 % of adults each year and in India 1-3% with in general population annually and 4-7 cases of Tennis Elbow per 1000 patients in general practice. The highest incidence is found in the age group 30 and older.

The management of Tennis Elbow includes Conservative management which comprises of oral analgesics, steroidal injections, local anaesthetic injections which are useful only in 40% of cases and about 10% may respond to Mill's Manoeuvre, where as other subjects requires Surgical management. Recent advances includes Autologous blood injections, Arthroscopic release, Counter force bracing, Extracorporeal Shock wave therapy (ESWT), Ultrasound guided percutaneous needle therapy and Rehabilitative exercises in which the efficacy is still under experimentations.

Thus, the present study is aimed at incorporating different combinations of *Valuka Sweda* which is best procedure in alleviating Pain, Swelling, Stiffness and Restricted movement as it possesses *Ushna Guna, Vata-Kaphahara, Shotha-Shulahara* and *Amahara* properties in the management of Tennis elbow.

KEYWORDS: Elbow joint, Tennis Elbow, *Valuka Sweda*

INTRODUCTION

Life of human being has been developed based on the art of carrying out daily activities such as eating, writing, lifting weights and other activities for which Hands and Joints are the primary involved structures¹.

Ayurvedic classics also emphasizes on importance of Hands and Joints where *Acharya Sushruta* states that “*Hasta Meva Pradhanam*” and gives a detail description regarding joints in *Sandhi Shareera* (detail study of joints) which includes definition, formation, number, classification, functioning and related structures of joints².

Tennis Elbow is a condition where Elbow Joint is primarily affected. The Elbow Joint is a Hinge type of synovial joint that provides great stability and movement for performing daily activities³.

In *Ayurveda* Elbow joint is attributed as *Koorpara Sandhi*. It is a type of *Kora Sandhi*, shape of Hinge, which is totally mobile in one direction and partially mobile in opposite direction. It is one among the *Bahu Marma* (Vital structure in upper limb), *Sandhi Marma* (Joint as a vital structure) and *Vaikalyakara Marma* (Injury to vital structure leading to deformity)².

“*Koorparakhyo Kunihi- Kunihi Sankuchita Bhumadhyaha*”-The injury to *Koorpara Marma* leads to contractures which in turn produce pain and difficulty in movement of joint and gripping the objects².

Tennis Elbow encompasses lateral, medial and posterior Elbow symptoms. The one commonly encountered is the lateral Tennis Elbow which is known as Lateral Epicondylitis or Classical Tennis Elbow and there is pain and tenderness on the lateral side of the Elbow some well-defined and some vague, that results from repetitive stress. Other varieties encompass Medial Tennis Elbow known as Golfer’s Elbow and Posterior Tennis Elbow around the margins of the Olecranon process. The clinical features comprises of Pain and Swelling in Elbow Joint and Difficulty in gripping objects and lifting them. Sports persons will also have difficulty in extending the elbow⁴.

It is a condition resulting in severe disability and reduced productivity of elbow joint. Almost more than one-third of Tennis players worldwide are affected with this condition over the age of 30 years due to faulty playing techniques⁵.

Also it is more common in non-Tennis players which came into light and became popularized across the country and worldwide when India's Cricketing legend Sachin Tendulkar, Virendra Sehwag and Sreeshanth suffered with this condition^{6,7}.

This condition affects even non-sports group of people like Homemakers (Indian housewives), Computer professionals, Carpenters, Drill workers, Miners and activities like Washing, Brooming, constant Laptop use etc. becomes major etiological factors as these jobs involve repetitive extension of elbow joint which causes stress and trauma over the Elbow Joint^{8,9}.

Recent statistical studies globally attributes 1% to 3 % of adults each year and in India, 1-3% with in general population annually and 4-7 cases of Tennis Elbow per 1000 patients in general practice. The highest incidence is found in the age group 30 and older^{10,11}.

The management of Tennis Elbow includes Conservative management which comprises of oral analgesics, steroidal injections, local anaesthetic injections which are useful only in 40% of cases and about 10% may respond to Mill's Manoeuvre, where as other subjects requires Surgical management. Recent advances includes Autologous blood injections, Arthroscopic release, Counter force bracing, Extracorporeal Shock wave therapy (ESWT), Ultrasound guided percutaneous needle therapy and Rehabilitative exercises in which the efficacy is still under experimentations¹².

Ayurveda being a holistic science if followed properly and systematically not only cures disease but also maintains the health of an individual, comprises an effective multi-faceted approach towards pain management, where in *Vata Dosha* is a prime most among *Tridosha* which is attributed for the *Ruja* (Pain)- "*Vatadrute Nasti Ruja*" ...¹³

The best pain management therapy among *Shadvidhopakrama* (06 basic treatment modalities) is *Swedana* (Sudation therapy). It plays a vital role in managing Tennis elbow as *Acharya Charaka* quotes "*Stambha Gaurava Sheetagnam Swedanam Swedakarakam* (Cha.Su 22/11)" which means *Swedana* is the procedure which nullifies Stiffness, Heaviness, Coldness and generates Sweat. Physiologically *Swedana* is a thermoregulatory process and therapeutically a procedure to eliminate bio waste material from the body by generation of direct or indirect heat relieving pain, swelling and stiffness.

*Valuka Sweda*¹⁴ (application of Heat by using heated pack of sand and there by inducing perspiration) one among *Swedana Karma* is included under broad category of *Sankara Sweda/Pinda Sweda/ Pottali Sweda*¹⁵ (fomentation by Bolus (*Pinda*) containing prescribed *Dravya* (drug) based on the condition with or without wrapped with the cloth), *Tapa Sweda* (application of direct heat to the body/body parts and *Ushma Sweda*^{16,17} (Fomentation by means of *Sikata* (Sand particles), *Tusha* (Husk) etc.).

Thus, the present study is aimed at incorporating different combinations of *Valuka Sweda* which is best *Swedana karma* in alleviating Pain, Swelling, Stiffness and Restricted movement as it possesses *Ushna Guna*, *Vata-Kaphahara*, *Shotha-Shulahara*, *Stambhahara*, *Srotomardavakara* and *Amahara* properties in the management of Tennis elbow.

OBJECTIVES

- To analyse the efficacy of different combinations of *Valuka Sweda* in the management of Tennis Elbow.

MATERIALS AND METHODS

The present study is aimed to collect, analyse and interpret all the available literatures including *Ayurvedic* Classics and contemporary science along with the published scientific papers in the reputed journals both in printed and online media.

Taking in consideration the clinical presentation of Tennis Elbow, as PAIN is the prime most troubleshoot factor, associated with Swelling, *Valuka Sweda* a potent *SHOOLAHARA* and *SHOTAHARA Swedana Karma* will be incorporated in the upcoming study in the management of Tennis Elbow.

TREATMENT PLAN:

Valuka Sweda, *Ashwagandha Valuka Sweda* and *Rasna Valuka Sweda* in Group A, B and C respectively in the management of Tennis Elbow.

STUDY DESIGN:

- a. Study design:** It is an open labelled randomized clinical study with a minimum of 150 subjects of either sex diagnosed with Tennis elbow will be assigned into 3 groups of 50 subjects in each.

- b. Sampling technique:**
 - The subjects who fulfil the inclusion criteria and willing to give written informed consent and willing to participate and comply with the study will be assigned to trial.

- c. Sample size**
 - It is an open labelled randomized clinical study with a minimum of 150 subjects of either sex diagnosed with Tennis elbow will be assigned into 3 groups of 50 subjects in each.
 - A special case Proforma containing all the necessary details pertaining to the study will be prepared.
 - The data obtained in all groups will be recorded, tabulated and statistically analysed.

CRITERIA FOR THE STUDY

- a. Diagnostic Criteria**
 - Subjects with signs and symptoms of Tennis Elbow like Pain in elbow joint, swelling in elbow joint and difficulty in gripping objects and lifting them.
 - **Maudsley's test:** Resisted extension of the middle finger elicits pain at the lateral epicondyle due to disease in the extensor digitorum communis.
 - **Cozen's Test:** Painful restricted extension of the wrist with elbow in full extension elicits pain at lateral elbow. Elbow held in extension, passive wrist flexion and pronation produces pain.

b. Inclusion criteria

- Subjects diagnosed with Tennis elbow based on any signs and symptoms like Pain in elbow joint, swelling in elbow joint and difficulty in gripping objects and lifting them.
- Subjects of age group of 30 to 60 years of either sex. Sub categorization of age group from 30-60 years as follows: 30-40 years, 40-50 years, 50-60 years.
- Subjects diagnosed with any of the three stages of Tennis Elbow.
- Subjects fit for scheduled treatment protocol.

c. Exclusion criteria

- Subjects with history of avascular necrosis, fractures and carcinoma of bones
- Subjects with other inflammatory and degenerative arthritic conditions and auto immune joint disorders such as Osteoarthritis, Osteomyelitis, Osteoporosis, Rheumatoid arthritis, Polymyalgia Rheumatic , SLE and Gout
- Subjects suffering with Neurological pain such as Cervical Radiculopathy and other neurological defects such as neuropathy.
- Subjects suffering with muscular pain due to Muscular Dystrophy, Fibromyalgia, Myopathies.
- Subjects with underlying Systemic diseases like Uncontrolled Hypertension, Diabetes Mellitus and Thyroid disorders.
- Subjects with HIV, HBSAg, Tuberculosis and Malignant tumours.

DISCUSSION:

Tennis Elbow encompasses lateral, medial and posterior Elbow symptoms. The one commonly encountered is the lateral Tennis Elbow which is known as Lateral Epicondylitis or Classical Tennis Elbow and there is pain and tenderness on the lateral side of the Elbow some well-defined and some vague, that results from repetitive stress. Other varieties encompass Medial Tennis Elbow known as Golfer's Elbow and Posterior Tennis Elbow around the margins of the Olecranon process.

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The management for Tennis Elbow includes Conservative management, Surgical management and Recent advances in which the efficacy is still under experimentations.

Considering the laborious subjects of Tennis Elbow and analysing all these factors the effective therapy *Valuka Sweda* one among the *Swedana Karma* will be incorporated in the present study. It is planned to analyse the efficacy of *Valuka Sweda*, *Ashwagandha Valuka Sweda* and *Rasna Valuka Sweda* in Group A, B and C respectively in the management of Tennis Elbow as these have Potent *SHOOLAHARA* and *SHOTAHARA* properties as follows:

Valuka Sweda a type of *Swedana Karma* has been selected for the present study in managing Tennis Elbow as it possess following attributes:

Valuka Sweda by its *Vata-Kaphahara* (mitigates vitiated *Vata Dosha* and *Vata-Kapha Dosha*), *Shoolahara* (mitigates pain), *Shotahara* (mitigates swelling), *Stambhahara* (mitigates stiffness), *Srotomardavakara* (brings about mardavata in srotas), *Pavakam* (increases *Agni*) and *Swedana Guna* and *Karma*:

- a. Minimize or mitigates *Srotorodha* in turn relives Pain and inflammation.
- b. Relieves the local congestion and there by mitigates clinical features of Tennis Elbow.
- c. Causes Vasodilation which increases circulation to the affected area which relieves Pain and Swelling.

Ashwagandha Choorna is selected as it possesses *Katu Tikta Kashaya rasa*, *Laghu Snigdha guna*, *Ushna veerya*, *Katu vipaka*, *Vata-Kaphahara* (mitigates vitiated *Vata*, *Vata-kapha Dosha*), *Shotahara* (mitigates swelling), *Shoolahara* (mitigates pain), *Balya* (induces strength) and *Rasayana* (acts as rejuvenation) properties¹⁸.

Rasna Choorna is selected as “*Visheshat Vataroghaghni*”, “*Rasna Vataharanam Shreshthaha*” which is best in *Vataroga*, possess *Tikta rasa*, *Guru guna*, *Ushna veerya* and *Katu Vipaka*, and has *Vata-Kaphahara* (mitigates vitiated *Vata*, *VataKapha Dosha*), *Shotahara* (mitigates swelling), *Shoolahara* (mitigates pain), *Amapachana* (reduces *Ama* and normalizes metabolic process), *Amavatahara* (mitigates *Amavata*) and *Vataroganasha* (mitigates *Vata Vyadhi*) properties¹⁸.

CONCLUSION:

The *Ruja* (Pain) is the most annoying physical sensation caused by injury or illness. Such one of the most painful condition is Tennis Elbow, which affects one of the major joints of upper limb, i.e. Elbow Joint.

The prevalence and incidence of the condition is increasing in immense in the present era due to excessive overuse of the elbow joint which includes all most all professionals such as sports freaks, home makers, software engineers, drillers, miners, carpenters etc.

The management of Tennis Elbow are not so effective and are still under experimentation.

Ayurveda being a holistic science and has effective management therapies for Pain, it is high time to incorporate *Ayurvedic* principles in understanding Tennis elbow and to plan treatment accordingly in this painful condition.

Thus, the study has been taken up to manage Tennis elbow by incorporating different combinations of *Valuka Sweda* a potent *Shoolahara* and *Shotahara Swedana karma* as *Valuka Sweda*, *Ashwagandha Valuka Sweda* and *Rasna Valuka Sweda* in Group A, B and C respectively.

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