

“A BIRDS EYE VIEW ON INCORPORATING AYURVEDIC PRINCIPLES AND TREATMENT IN THE MANAGEMENT OF TENNIS ELBOW”

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ABSTRACT

Tennis Elbow syndrome encompasses lateral, medial and posterior Elbow symptoms. The one commonly encountered is the lateral Tennis Elbow which is known as 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.

The clinical features along with Pain comprises of difficulty in gripping objects and lifting them. Sports persons will have difficulty in extending the elbow.

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

The conventional therapy for Tennis Elbow includes Conservative management which comprise oral analgesics (NSAID's), Injection of local anaesthetic and steroid which is 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 Extracorporeal Shock wave therapy (ESWT), Arthroscopic release, Autologous blood injections, Counter force bracing, Ultrasound guided percutaneous needle therapy and Rehabilitative exercises in which the efficacy is still under experimentations.

Thus, it is needed to study detail regarding Tennis elbow and find effective management in Ayurveda which reduces pain and helps to retain normal functionality of elbow joint.

KEYWORDS: Elbow joint, Tennis Elbow, Ayurveda

INTRODUCTION

“One cannot go through life allowing PAIN to dictate how individual behaves”

The life of human being evolved on the art of performance of daily activities. Life would not have been easy if we could not have move around and performed the daily activities such as eating, writing, weight lifting etc. for which hands and joints are the major involved structures¹.

Hands and joints are most important structures of human body as these are solely responsible for various movements. A joint is defined as the junction where bones and muscles meet together facilitating movement and stability².

Acharya Sushruta states that “Hasta Meva Pradhanam”. Sandhi Shareera includes study of joints and is classified as Chala and Achala Sandhi which are responsible for various movements³.

The Elbow Joint is a Hinge type synovial joint that provides great stability and movement for performing daily activities⁴.

Koorpara Sandhi 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 Marmanga⁵. The injury to Koorpara Marma leads to contractures which in turn produces pain and difficulty in movement of joint and gripping the objects. (Koorparakhyo Kunihi- Kunihi Sankuchita Bhumadhyaha)³.

Surely everyone is fascinated by Tennis. We may not get a place under the sun as great Tennis players, but certainly, we may get an appointment with an orthopedic surgeon for a problem common in them, that too without playing Tennis! Yes, the obvious reference is towards Tennis Elbow.^{6,7}

More than one third Tennis players all over the world are affected with this problems over 35 years of age obviously due to faulty playing techniques.⁷

Ironically Tennis Elbow 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 and Sreeshanth suffered with this condition.^{8,9}

Unfortunately even non-sports groups of persons such as Home makers (Indian Housewives), Carpenters, Miners, Drill workers, Computer professionals are suffering with this condition due to indulging in activities such as washing, brooming, continuous usage of laptops etc. which requires repetitive extension of the Elbow and produces stress upon the Elbow Joint^{10, 11}.

Recent statistical studies globally attributes 1% to 3 % of adults each year and in India, 4-7 cases of Tennis Elbow per 1000 patients in general practice and 1-3% with in general population annually. The highest incidence is found in the age group 30 and older^{12, 13}.

Tennis Elbow syndrome encompasses lateral, medial and posterior Elbow symptoms. The one commonly encountered is the lateral Tennis Elbow which is known as 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 encompasses Medial Tennis Elbow, known as Golfer's Elbow and Posterior Tennis Elbow around the margins of the Olecranon process. The location of Pain in each of these is 75% in Lateral Epicondyle, 17% in Lateral Mass, 10% in Medial Epicondyle, where as 8% in Posterior aspect¹⁴.

The prime most causative factor is "Epicondylitis", which is due to single or multiple tears in the Common Extensor Origin, Periostitis and Angiofibroblastic Proliferation of Extensor Carpi Radialis Bravis (ECRB). The other causative factors are Inflammation of Adventitious Bursa, Calcified deposits, Painful Annular Ligament and Pain of Neurological Origin.¹⁵

The clinical features along with Pain comprises of difficulty in gripping objects and lifting them. Sports persons will have difficulty in extending the elbow¹⁶.

Ayurveda being a holistic science which not only cures disease but also maintains the health of an individual, if followed properly and systematically, comprises an effective multidimensional approach towards pain management, where in which a Prime most Dosha among Tridosha is attributed for the Ruja (Pain) stating "Vatadrute Nasti Ruja...²"

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requires Surgical management. Recent advances includes Extracorporeal Shock wave therapy (ESWT), Arthroscopic release, Autologous blood injections, Counter force bracing, Ultrasound guided percutaneous needle therapy and Rehabilitative exercises in which the efficacy is still under experimentations¹⁷.

Thus, it is needed to study detail regarding Tennis elbow and find effective management in Ayurveda which reduces pain and helps to retain normal functionality of elbow joint.

OBJECTIVES

- To analyze the grievous condition Tennis Elbow and to treat it effectively by means of Ayurvedic principle and practices.

MATERIALS AND METHODS

The present study is aimed to collect, analyse and interpret all the available literatures including Ayurvedic Classics and contemporary science, including 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 troublesome factor, associated with Swelling, the following treatments which are having potent VEDANAHAARA and SHOTAHARA action will be incorporated in the upcoming study in the management of Tennis Elbow.

TREATMENT PLAN:

Nirgundi Guggulu with Rasnaerandadi Kashaya and Valuka Sweda, Nirgundi Guggulu with Rasnaerandadi Kashaya and Rasna Valuka Sweda, Nirgundi guggulu with Rasnaerandadi Kashaya and Ashwagandha Valuka Sweda and Nirgundi Guggulu with Rasnaerandadi Kashaya and Devadaru Valuka Sweda in Group A, B, C and D respectively in the management of Tennis Elbow.

STUDY DESIGN:

- Study design:** It is an open labelled randomized clinical study with a minimum of 200 subjects of either sex diagnosed with Tennis elbow will be assigned into 4 groups of 50 subjects in each.
- 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 200 subjects of either sex diagnosed with Tennis elbow will be assigned into 4 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 analyzed.
- Appropriate statistical methods will be employed for the collected data.

CRITERIA FOR THE STUDY

a. Diagnostic Criteria

- Subjects with signs and symptoms of Tennis Elbow such as Pain in elbow joint, swelling in elbow joint, difficulty in gripping objects and lifting them.
- **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.
- **Maudsley's test:** Resisted extension of the middle finger elicits pain at the lateral epicondyle due to disease in the extensor digitorum communis.

b. Inclusion criteria

- Subjects diagnosed with Tennis elbow based on any signs and symptoms such as Pain in elbow joint, swelling in elbow joint, difficulty in gripping objects and lifting them.
- Subjects diagnosed with any of the three stages of Tennis Elbow.
- Subjects of age group of 20 to 60 years of either sex.
Sub categorization of age group from 20-60 years as follows:
20-30 years, 30-40 years, 40-50 years, 50-60 years.
- Subjects fit for scheduled treatment protocol.

c. Exclusion criteria

- Subjects with other degenerative and inflammatory arthritic conditions and Auto immune joint disorders such as Rheumatoid arthritis, Osteo Arthritis, Gout, Osteoporosis, Osteo Myelitis, SLE and Polymyalgia rheumatis.
- Subjects with history of fractures, avascular necrosis and Carcinoma of bones.
- Subjects suffering with Neurological pain and other neurological defects such as neuropathy.
- Subjects suffering with muscular pain due to Myopathies, Muscular Dystrophy, Fibromyalgia.
- Subjects with underlying Systemic diseases like Uncontrolled Diabetes Mellitus, Hypertension, Thyroid disorders.
- Pregnant and Lactating women.
- Subjects with Malignant tumors, HIV, HBSAg and Tuberculosis.

DISCUSSION:

Tennis Elbow syndrome encompasses lateral, medial and posterior Elbow symptoms. The one commonly encountered is the lateral Tennis Elbow which is known as 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.

Recent statistical studies globally attributes 1% to 3 % of adults each year and in India, 4-7 cases of Tennis Elbow per 1000 patients in general practice and 1-3% with in general population annually. The highest incidence is found in the age group 30 and older^{12, 13}.

The conventional therapy for Tennis Elbow includes Conservative management, in which the efficacy is still under experimentations.

Analyzing all these factors, considering the arduous subjects of Tennis Elbow and the tremendous Ayurvedic therapies, the present study is planned to analyze the efficacy of Nirgundi Guggulu with Rasnaerandadi Kashaya and Valuka Sweda, Nirgundi Guggulu with Rasnaerandadi Kashaya and Rasna Valuka Sweda, Nirgundi guggulu with Rasnaerandadi Kashaya and Ashwagandha Valuka Sweda and Nirgundi Guggulu with Rasnaerandadi Kashaya and Devadaru Valuka Sweda in Group A, B, C and D respectively in the management of Tennis Elbow as these have Potent VEDANAHAARA and SHOTAHARA properties as follows:

Valuka Sweda¹⁸ is selected for the present study being a potent Vata-Kapha hara, Shoolahara (mitigates pain), Stambha hara (mitigates stiffness), Srotomardavakara (brings about mardavata in srotas), Pavakam (Increases Agni), which comes under the category of Swedana, (Pottali Sweda) which is one among the Shadvidhopakrama.

Rasna Choorna¹⁹ is selected as “Rasna Vataharanam Shreshtaha”²⁰, “Visheshat Vataroghaghi”, which is best in Vataroga, possess Tikta rasa, Guru guna, Ushna veerya and Katu Vipaka, and has Vata-kaphahara, Shoolahara, Shothahara, Amapachana, Amavatahara, Vataroganasha properties.

Ashwagandha Choorna¹⁹ is selected as it possess Katu tikta kashaya rasa, laghu, snigdha guna, ushna veerya, katu vipaka, Kapha vata hara, balya, Rasayana, Vataghni and Shotahara.

Devadaru Choorna¹⁹ is selected as it possess Tikta, Katu, Kashaya Rasa, Rooksha, Laghu guna, Ushna veerya, Katu vipaka, Vata-kapha hara, Shophahara, Vibandhahara, Amadoshahara.

Nirgundi Guggulu²¹ comprises of Nirgundi and Guggulu and is selected as it possess property of Vataroga hara. Nirgundi¹⁹ possess Katu Tikta rasa, Laghu Rooksha guna, Ushna veerya and Katu vipaka, Vatakapha hara, Shoolanashana, Vranaropana, Vatavyadhi hara, Shophahara, AmaMarutahara. Guggulu¹⁹: “Guggulu medoanilaharanam shreshtaha”, possess tikta katu rasa, laghu Rooksha, vishada, Sookshma, Sara. Snigdha, Picchila guna, Ushna veerya, Katu vipaka, Tridoshahara, Rasayana, AmaMarutahara and Shotahara.

Rasnaerandadi Kashaya²² (Rasna, Eranda, Bala, Sahachara, Shatavari, Dusparsha, Vasa, Amruta, Devadaru, Ativisha, Musta, Kokilaksha, Shati, Shunti) is selected as it possess Vatahara, Shoolahara, Shophahara and Vataraktahara properties.

CONCLUSION:

“Numbing the pain for a while will make it worse when a person gets afflicted to it”.

Pain is the highly unpleasant physical sensation caused by illness or injury.

Such one of the most grievous painful condition is Tennis Elbow, which affects one of the major joints of upper limb, i.e Elbow Joint.

The incidence and Prevalence of the condition is tremendously increasing in the present era due to overuse of the elbow joint which includes all most all professionals such as sports freaks, software engineers, carpenters etc.including bouse wives.

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

As Ayurveda being a holistic science and has tremendous management therapies for Pain, its time to incorporate Ayurvedic principles in understanding Tennis elbow and to plan treatment accordingly in the greivous painfull condition Tennis elbow.

Thus, the study has been taken up to manage Tennis elbow by incorporating Ayurvedic principles and treatment by means of tremendous Ayurvedic therapies such as Nirgundi Guggulu with Rasnaerandadi Kashaya and Valuka Sweda, Nirgundi Guggulu with Rasnaerandadi Kashaya and Rasna Valuka Sweda, Nirgundi guggulu with Rasnaerandadi Kashaya and Ashwagandha Valuka Sweda and Nirgundi Guggulu with Rasnaerandadi Kashaya and Devadaru Valuka Sweda in Group A, B, C and D respectively.

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