# ORTHO HOLLER

**COCHIN ORTHOPAEDICS SOCIETY NEWSLETTER - AUGUST 2021** 

#### Chief Editor: Dr.Divya G, Co Editor: Dr. Balu C Babu



## President's Message

#### **Dear members**

It was indeed a challenging year for COS with the pandemic in full swing. In spite of the extraordinary situation and restrictions,we could still do all our monthly clinical meetings. On the academic side we could start a PG OSCE, program for the trainees, as well as we were awarded the trophy for the best club by KOA. On the nonacademic side we had the online Onam and X mas celebrations and debut cricket league matches for doctors.

COS is a vibrant organization with dynamic, dedicated members who want excel in whatever they do. I would like to take this opportunity to thank all the COS members for their support and help they have given me always. We are highly thankful and obliged to our spouses and family members for their wholehearted support they extended to us in our activities.

Lastly I would like to wish the newly elected Office bearers the very best of luck. May their united, harmonious and enthusiastic work take COS to the next level.

Thank you **Dr. Suresh Paul** Jai COS Jai KOA Jai IOA



# THE COCHIN ORTHOPAEDIC SOCIETY

Dr. Suresh Paul Hon. President

Dr. Sudheer Shareef Hon. Secretary **Dr. Sujit Jos** Hon. Treasurer

Prof. Chandrababu K K Imm Past President Dr. Mathew K C Vice President

Dr. Jiss Joseph Panakkal IT Secretary

Exofficio Committee Members Dr. Cheriyan Kovoor C Dr Sabin Viswanath Dr. Dennis P Jose Executive Committee Members Dr. Paulose T Y Dr. Riju R



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Respected seniors and dear friends, it was a privilege to serve as the Secretary of the largest Orthopaedic Club in Kerala, The Cochin Orthopaedic Society. Now it's time to hand over the baton to the new "TEAM COS". Due to the Covid-19 pandemic, we were forced to cancel many of our physical tours, camps and meetings but we adjusted and moved on to virtual platform. We started conducting our clinical meetings through Zoom, which by itself was a model for all other Ortho Clubs and fellow specialist organisations. Though Onam Sadhya was lost, we compensated with a feast of online programs as "Orthonam Coronam 2020" which became a blockbuster with more than 400 viewers and more than 75 members participating with their families. We also celebrated Xmas and New Year in the online mode. During my tenure, we could bring back the coveted "Best Club" award from KOA. I thank each and every one of you for this achievement. I would also like to congratulate COS Cricket team captain Dr Tom Jose, who marshalled the team to win the KOA Cricket Championship. During my term as the Secretary of COS, we started the newsletter "Ortho Holler ", first of its kind to be published from a district orthopaedic club in India. I congratulate Dr Divya. G and Dr Balu C Babu, editors of Orthoholler, for bringing out the third edition. The next mega-event during our tenure was the Doctors Big Bash League -2021, the Cricket Tournament conducted exclusively for doctors. It was a fantastic event with 10 teams across Kerala participating . I congratulate Dr Biju Jos Jacob, Dr Vinod Padmanabhan, Dr Paul Jose, Dr Tom Jose, Dr Babu George and the Organising Secretary Dr Joice Varghese for conducting the exciting event in style. Cochin Orthopaedic Society Online PG Training Programme(COSOTP), a new academic venture by us is well attended by residents all over Kerala. I congratulate Dr Bipin Theruvil, Dr Jiss Joseph Panackal, Dr Balu C. Babu and Dr Divya. G for organising and conducting it well. We also could complete the official registration of the COS Lagoon this year. As the representative of COS in the KOA executive committee, I had successfully initiated the discussion for listing the demise of Dr Babukutty from non-covid death to covid death. Also, regarding the Covid insurance from KOA for senior members above 65 years, I could effectively bring in reasonable compensation favouring them. Due to the Covid pandemic, KOACON was conducted on a virtual platform. KOA executive committee entrusted Dr Vijaymohan, our member as Chairman of Scientific Committee and me as Chairman of Registration committee. I would like to thank KOA Executive committee for giving the opportunity and we could register more than 540 members and the registrations were included in the KOA BENEVOLENT FUND. Our 3 rd Biennial Cochin International Ortho paedic Summit 2021 is about to happen on October 14-17. The topic selected for our Conference is "Complications in Orthopaedics" through an online platform. I request you all to register and participate to make it a grand event. Before I conclude, I would like to thank Dr Venugopal Radhakrishnan, Dr John T. John and Dr Sujit Jos, for the three pillars who stood on my right and left and guided and helped me throughout,to achieve all these. I also thank my Presidents Dr Rajiv Stanley, Dr Rajesh Simon, Prof. Chandrababu. K. K and Dr Suresh Paul and our office secretary Mr Srinivas for the unconditional support that was given to me. Now the time has arrived for the new Team COS to take COS to greater heights. Best wishes to Dr Mathew K. C sir, Dr Sujit Jos and Dr Jiss Joseph for a brighter association year. Thanks. Jai COS. Jai KOA.

### **Tennis Elbow**



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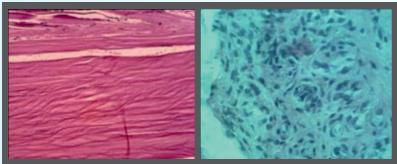
#### Introduction

Tennis elbow was initially described by Runge in 1873. Henry Morris called it the 'Lawn Tennis Arm' in The Lancet in 1882. Other synonyms include Lateral Epicondylitis and Angiofibroblastic Hyperplasia. The condition affects 1-3% of adults in their third and fourth decades of age and is thought to be an overuse injury.

#### **Anatomy and Pathology**

The term 'epicondylitis' is a misnomer as there doesn't occur any inflammation of the lateral epicondyle. The pathology lies in the extensor tendons attaching to the lateral epicondyle instead. Four of the extensor tendons, viz., extensor carpi radialis brevis, extensor digitorum communis, extensor digiti minimi and extensor carpi ulnaris converge to attach via a single tendon. The most commonly affected tendon is the extensor carpi radialis brevis.

Repetitive overuse of the extensor tendons causes multiple microtears which in turn leads to a cascade of degenerative processes which occurs within the tendon, called tendinosis. The histological picture has dense populations of fibroblasts, vascular hyperplasia and disorganized collagen, more popularly referred to as angiofibroblastic hyperplasia.



H & E slide of normal tendon in elbow Clinical presentation

#### History

Lateral sided elbow pain- sharp in nature, aggravated by wrist extension and gripping activities

Occupational circumstances: jobs involving repetitive elbow flexion and extension, vibrating tools (>2 hours/day)

Sporting activities that involve repetitive wrist motion or a power grip (tennis, golf, overhead throwing)

#### Examination

Palpation causes point tenderness over the lateral epicondyle and lateral supracondylar ridge.

#### Provocative Tests

**Mill's Test:** Examiner palpates the lateral epicondyle while passively pronating the forearm, flexing the wrist and extending the elbow. Positive test will cause pain near the lateral epicondyle. (Sensitivity-53%, Specificity-100%)

**Maudsley's Test:** Examiner resists extension of the middle finger with the patient's elbow at 90 degree flexion and forearm pronated (Sensitivity-88%, Specificity-0%)



Figure A & B: Mills test

Investigations

Diagnosis is usually made on the basis of history and physical signs. Ultrasound may demonstrate structural changes of affected tendons, calcifications, tissue tears and areas of degeneration. Two-thirds of the patients may demonstrate an altered signal on MRI which may long persist after the symptoms have

resolved. *Datho Holler* 2 Figure C .Maudsley Test

Angiofibroblastic hyperplasia



Exotic investigations include- infra red thermography, isotope bone scan and laser doppler flowmetry.

#### **Differential Diagnosis**

Main differentials include – radial tunnel syndrome, tenosynovitis and chronic pain conditions. There is ambiguity in literature as to where posterior interosseous nerve compression begins and tennis elbow ends. It is reported that 30% of cases of tennis elbow suffer from PIN entrapment.

In Radial Tunnel Syndrome, the PIN is said to be crushed under the free edge of the supinator muscle. This condition is characterized by pain on resisted supination and resisted extension of middle finger. The pain localizes over the mobile wad than the lateral epicondyle.

#### Treatment

Usually is self limiting with 70-80% improving by one year. Primary line of treatment include rest, non-steroidal anti-inflammatory drugs, corticosteroid injections, physical therapy and bracing.

Though resting and avoiding activities lacks clinical evidence, they along with NSAIDS (topical and oral) have good evidence for short term pain reduction.

Short term improvements have been recorded in various studies for local corticosteroid injections, but seems to have no significant benefit compared to rest alone, over a 52 week period.

Exercise and physiotherapy, mainly stretching and strengthening exercises, concentric and eccentric muscle training, ultrasound and massage have been found to have excellent results at the end of 6 weeks.

Bracing is yet another option . The forearm support band aims to relieve tension in the extensor carpi radialis brevis by shifting the 'origin point' distal to the elbow. This reportedly reduces the force at the origin of the tendon by 15%.

Platelet Rich Plasma (PRP) is blood plasma with concentrated platelets which have growth factors necessary to initiate and accelerate tissue repair and regeneration. The technique involves blood extraction, centrifugation and injection of the supernatant plasma into the lateral epicondyle. Good outcomes have been reported. However, more studies are required before it becomes established as a mainstream form of management.

Even though there is no consensus in literature regarding benefit, botox injections have been reported by few as giving some pain relief by inducing a temporary period of muscle paralysis thus giving the soft tissue time to repair and regenerate.

Laser therapy and Acupuncture have been used with mixed benefits.

Surgery for lateral epicondylitis is the last option and should be reserved for refractory cases which have failed prolonged periods of conservative therapy. Surgery can be done by open techniques, percutaneous releases and arthroscopy. The main principles includes tendon release or reattachment, epicondylar drilling or tendinosis debridement. Arthroscopic techniques give the added advantage of being able to address concomitant pathologies.

#### Conclusion

Tennis elbow is a tendinosis affecting the extensor carpi radialis brevis tendon which undergoes degenerative changes with superimposed impaired healing. Repetitive overuse (occupational or sporting) is most common cause. Mill's test is useful in ruling in the condition while Maudsley's test is better at ruling out lateral epicondylitis. Radial tunnel syndrome is the most important differential diagnosis to be considered. Usually a self- limiting condition with 70-80% resolving within an year. Rest, NSAIDS, physical therapy and bracing constitute the primary line of treatment. Secondary modes of treatment include Corticosteroid and Platelet Rich Plasma injections. Surgery is reserved for recalcitrant cases only.

MRI demonstrating increased signa intensity at the orgin of ECRB



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