# TOS NEWSLETTER



Dr. G. Mukesh Mohan
President TOS





**Dr. J. Terrence Jose Jerome** *Secretary TOS* 

#### Welcome Message

#### Dear Members

I am pleased to welcome you to the latest edition of our orthopedic society newsletter as we navigate these challenging times. It is more important than ever to stay connected and informed about the latest developments in our field. In this issue, you will find a wealth of information on new research, innovative treatments, the world of and upcoming events in orthopedics. We are also excited to feature interviews with some of the experts in our field, Who will share their insights and perspective on the latest trends and challenges.

I encourage you to use this valuable resource and share your thoughts and ideas. Our society is only as strong as its members, and we are always looking for new ways to collaborate and support one another.

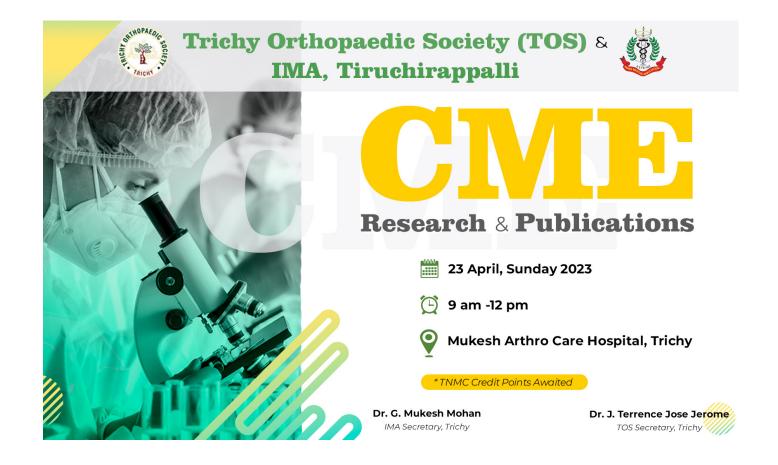
I appreciate your support and our society, and I look forward to seeing you at our upcoming events

Best regards

Dr. Devendran MS (Ortho)

TOS EC Member,
Senior Assistant Professor KAPV govt medical college & City medical center, Trichy

## **CME Research Methodology:**



"A candle does not lose anything by lighting another."

Prof Dr. Raju Vaishya, Prof Kartick Vishwanatan, Dr. Rishi Kanna, Dr. Gayatri, Dr. Sassendran, & Dr. Samundeeswari were the panelist with awe-inspiring presentations during the CME on Research Methodology and enlightened the delegates with rich knowledge about research and publications

Sacrificing their Sunday is their generosity and kindness

Trichy Orthopedics Society, IMA Tiruchirappalli, Tamilnadu

Orthopaedics Association, Orthopedic Association of South Indian states & Indian orthopedic association highly appreciate everyone's contribution to imparting knowledge on research & methodology

Over 50 participants benefitted from this event.

Tamilnadu Medical Council gave 1 credit points



Enthusiastic delegate's interactive discussion made this event a worthy.

The organizing team did a splendid performance on stage & off stage

We are sure that more publications will happen from this event

















# Case Study:

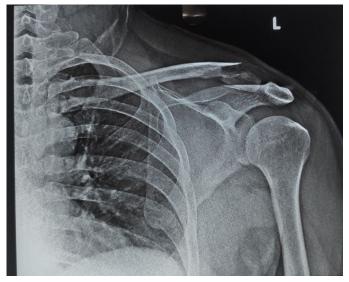
### **Sutures for fractures**





Stabilisation of fractures is one of the primary medical care methods that could be provided. A renowned anthropologist once said that a healed femur is one of the earliest evidences of civilisation. Without culture and people caring for each other, a person who sustains a fractured femur does not have long enough for a fracture to heal. Hence it is no surprise various societies have evolved multiple mechanisms to treat fractures, most often by immobilisation and sometimes by traction.

Internal fixation of fractures was proposed in nineteenth and early twentieth centuries. Various fixation devices a materials were proposed. Of them, metallic implants nd were most often used. Further development of K Nail fixation AO principles internal fixation of Kunsher and primary of established metals the method as stabilisation, and the most commonly used metals are stainless Fracture fixation titanium. and is synonymous steel now with metallic implants.



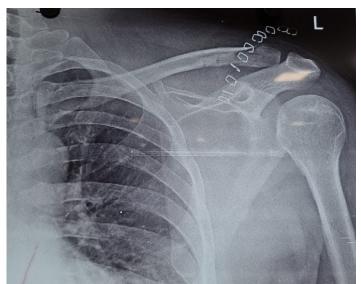
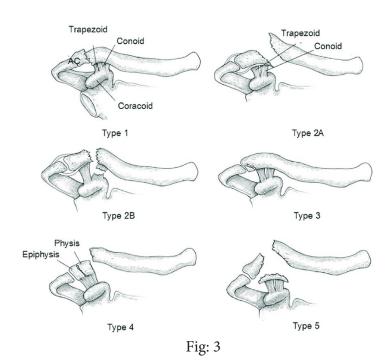


Fig: 1 Fig: 2

However, there are difficulties in using metals, with the principal difficulty being the need for removal. In specific situations, other difficulties encountered are implant prominence in skin irritation and risk of fracture subcutaneous bones, comminution in the case of small fragments. Further, implants into joints always require implant removal. Despite these difficulties, metals are the predominant materials used in fracture fixation. Metals are popular because only metals have sufficient strength to withstand loads to allow early weight bearing and can be designed into screws to provide compressive forces.

Some specific fractures do not need compressive forces to heal and are not weight-bearing. A recent understanding of fracture healing has shown that not all fractures need compression and stability for fracture healing. Also, the development of high-strength sutures has provided alternate offer sufficient strength for fracture to Such high-strength sutures were initially used to fix avulsion essentially ligament injuries with attached fracture, PCL Avulsion ACL avulsion Patella fracture and Conoid process fracture. Recently, high-strength sutures have been employed in fractures other than avulsion fractures.

Years male patient presented history with a of injury to his left shoulder. evaluation The showed fracture of the lateral end of the clavicle Type 2 B. (Figure 1). This fracture is conventionally managed with internal fixation using specialised plates like lateral clavicle plates or hook plates. While a hook plate might result in impingement and shoulder pain,



a lateral clavicle plate has a high failure rate. Displacement of this fracture is due to the loss of the Conoid ligament's or trapezoid

ligaments' stabilisation effect (Figure 2). The optimal treatment this fracture is the treatment of coracoclavicular ligaments by placing an internal brace allowing the ligaments to heal. We stabilised this fracture by providing an internal brace in the form of a fibre tape which is passed inferior to coracoid, deep to the coracoid attachments acromioclavicular ligament and pectoralis minor, and passing fibre tape through bone tunnels in clavicle and tied on the superior surface of the clavicle (Figure 3). While some surgeons add plate to this construct, the of plate fixation fixation addition optional for this fracture and sutures in isolation give sufficient strength to the ligaments and bones to heal. We could achieve and maintain a sound reduction. (Figure 4) and the patient regained full function (Figure 5).



Fig: 4