

34<sup>th</sup> Euro-Global Summit on **Cancer Therapy & Radiation Oncology**  
&  
6<sup>th</sup> International Conference on **Big Data Analysis and Data Mining**  
&  
13<sup>th</sup> International Conference on **Orthopedics, Arthroplasty and Rheumatology**  
July 25-27, 2019 London, UK



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### **Percutaneous repair technique of acute closed traumatic tendo-achilles rupture using suture anchors and fiber wire**

**Introduction:** Achilles tendon is the strongest and thickest tendon in the human body, which takes its name Achilles, from Homer's Iliad. Incidence rate of these ruptures range from 6 to 18 per 100000 populations. Several operative and non-operative treatment options are available. Operative repair of Achilles tendon ruptures leads to improved early outcomes, in terms of length, strength, functional activities and reduced tendon elongation compared to non-operative treatment. Operative methods include percutaneous, mini-open and open Achilles repair. Open repairs carry an increased risk of wound healing problems, whereas minimally invasive techniques are reported to have an increased risk of iatrogenic nerve injury.

**Materials & Methods:** Twenty patients with acute closed traumatic Tendo-Achilles rupture were operated using above mentioned technique between January 2010 to June 2017 in Bangalore out of which 15 were males and 5 were females. Patient was put on anterior below knee slab in plantar flexion of the foot for 2 weeks followed by walking below knee cast for 4 weeks. Patients were followed up at 6 weeks, 3 months, 6 months and 1 year following surgery and complications if any were observed. Postoperative AOFAS ankle-hind foot score was taken at last follow up.

**Results:** Percutaneous Tendo-Achilles repair has a good outcome in 90% of the cases. There were two cases with complications. One case was with surgical site infection at one of the puncture sites and the other was sural nerve hypoesthesia. The average AOFAS score was 89% (76-92) in which 65% (13) were considered excellent, 25% (5) were considered good and 10% (02) were considered fair outcome. There were no re-ruptures.

**Discussions:** There have been many advances in percutaneous and mini open repairs of Tendo-Achilles tear to reduce the risk of complications. In the technique described here, distal bony fixation is achieved with the use of suture anchors reducing the number of suture-tendon interfaces which in turn reduces the chance of failure. The study also discusses about the risks and methods to avoid iatrogenic nerve injury and measure the outcome using AOFAS ankle-hind foot score at one year follow up.

**Conclusion:** We present our technique of percutaneous Tendo-Achilles repair which has minimal wound and nerve injury complications and early return to activities with a good functional outcome.

## JOINT EVENT

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### Biography

Dr. Mallinath G has done his MBBS from Mysore Medical college, Mysore University, Karnataka, India and pursued his MS in Orthopaedic All India Institute of Medical Sciences [AIIMS]. He had done his fellowship in Joint Replacement from AIIMS. Currently he is a Senior Consultant Orthopedic Surgeon in Manipal Hospitals Bangalore. His areas of Interest are Knee Surgery, Hip Surgery, knee and shoulder Arthroscopy. Experienced in Spine surgery and Arthroscopy and also has an experience of 4 years in teaching for both the Undergraduates and Postgraduates at AIIMS.

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