

## **TO ASSESS THE ROLE OF SYNDESMOTIC SCREW FIXATION IN ANKLE INJURIES OF OA TYPE B AND WEBER TYPE C**

### **ABSTRACT:**

**BACKGROUND:** Ankle fractures with syndesmotic injury are not uncommon in orthopaedic practice. **OBJECTIVE** of this study is to assess the functional outcome of syndesmotic screw fixation in ankle fractures of Weber type C

**DESIGN** – Prospective study

**MATERIALS** - In our study of 20 patients (12 male and 6 female ) with ankle fractures of Weber type C treated with syndesmotic screw fixation using 3.5 mm cortical screws in addition to fixation of medial and lateral malleolus .patients were followed for 20 months .

**METHODS** - Functional outcome was analysed at 6 weeks , 12 weeks , 6 months , 12 months . Follow up analysis was made using AOFAS scoring and AOFAS grading criteria.

**RESULTS** - 20 patients were operated out of which two patients lost follow up hence excluded from the study. The longest follow up period was 20 months and shortest follow up period was 9 months, mean follow up period was 14 months. Follow up analysis was made using AOFAS scoring and AOFAS grading criteria.

In this study, 50% of patients had excellent outcome, 38.89% patients had good outcome and 5.56% had fair outcome, while 5.56% had poor outcome.

In this study, only 1 patient developed medial malleolar screw prominence and wound infection, treated with IV antibiotics. One patient had implant failure as patient started walking on second post operative day

**CONCLUSION** - For all cases of Ankle fractures with syndesmotic diastasis, open reduction and screw fixation of ankle fracture with syndesmotic screw fixation helped to achieve good union of fractures and pain free, stable ankle joint. Syndesmotic screw fixation with three cortex purchase (3.5 mm cortical screw) does not lead to screw breakage on weight bearing. In conclusion, treatment of ankle fracture with syndesmotic injury with open reduction and screw fixation facilitated early mobilization of the patients and helped achieving stable, pain free ankle joints and preventing ankle joint arthritis.

**KEYWORDS:** syndesmosis, syndesmotic screw, AOFAS scale