

## **SINUS TARSI APPROACH IN TREATING INTRA-ARTICULAR CALCANEAL FRACTURE**

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**Introduction:** Calcaneal fracture treatment has evolved over the years. Once thought to be a dreadful fracture with no options of treatment is now being treated with internal fixation with quite good results. From conservative treatment in a cast to open reduction and internal fixation using an extensile approach and now recently to the sinus tarsi approach. Here we would like to share our experience in treating an intraarticular calcaneal fracture using the sinus tarsi approach.

**Discussion:** A 4 cm transverse incision was made just below the lateral malleolus. Careful dissection was carried out until the sinus tarsi was exposed retracting the peroneal tendon inferiorly. A 4mm Schanz pin was inserted into the superolateral fragment and jacked up after securing the lateral articular piece with a k wire. Another Schanz pin was inserted into the main tuberosity fragment from the lateral aspect and the heel brought into valgus. After a good reduction was obtained, multiple k wires were used to stabilize all the fragments. The MIPO plate was then inserted into the wound and fixed with screws. Two additional screws were inserted to maintain length and height of the calcaneum.

**Conclusion:** Intra-articular calcaneal fractures can be safely treated using the sinus tarsi approach and MIPO technique with good radiological outcome. In order to be successful the surgery has to be done as soon as possible. This is in contrast to the classic extensile approach where surgery has to be delayed until favourable soft tissue condition (wrinkle sign) is achieved. Many a times fracture reduction becomes more difficult when surgery is delayed. The success of the surgery depends on the indirect reduction technique. This approach has a steep learning curve that cannot be underestimated and the surgery should only be undertaken by surgeons who are well versed in the treatment of calcaneal fractures.