# A Surgical Fixation of Rare Peripheral Talar Fracture: Terengganu Experience

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## **INTRODUCTION:**

Peripheral Talar fracture is a rare talar injury, mostly treated conservatively without surgery. Determining fracture patterns & involvement of articular surfaces play an important role for making decision for treatment. Aim for surgical treatment mostly to restore articular congruency.

#### **REPORT:**

We are reporting a case of a 31 years old gentleman who was involved in a motorcycle accident, sustained a pain & swelling over left ankle with limited ankle range of motion. Initial ankle radiographs showed vague fracture visualisation, which subsequently proceeded with ankle computed tomography (CT) scan. Findings shown oblique talar head & talar lateral process fracture. Cryocuff was initiated preoperatively, and the patient was treated surgically with headless compression screw over the both fracture fragments after soft tissue swelling subsided.

Post-operatively, the patient underwent serial physiotherapy for ankle range of motion exercise. At 5 weeks post-op, the patient was allowed for partial weight bearing with controlled ankle motion (CAM) walking boot.

At 8 weeks post-op, full weight-bearing with CAM walking boot. At 10 weeks post-op, patient allowed partial weight-bearing without CAM walking boot, and at 12 weeks post-op, patient allowed full weight-bearing ambulation. Radiological union was observed at 10 weeks post-op and full ankle joint range of motion restored.



Figure 1: Pre-op imaging.



Figure 2: Post-op 10 weeks radiograph.

# **CONCLUSION:**

Lateral process fracture resulted from forced dorsiflexion, axial loading and inversion external rotation, which commonly found in snowboarders. CT evaluation may assist in determining vague fracture patterns & decisions on surgical treatment. Restoration of articular congruency may assist in good ankle range of motion outcome and allowing early joint mobilisation, hence reduces the risk of secondary osteoarthritis of ankle joint.

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