

# **Primary Subtalar Fusion For Advance Type Of Post Traumatic Talus Fracture Using External Fixator – Case Series**

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## **INTRODUCTION AND OBJECTIVE**

Comminuted intra-articular talus fractures or Hawkin type 111 and 1V often culminate in subtalar arthrosis and stiffness even after operative reduction. In some instances, subtalar arthrodesis is necessary to reduce the symptoms. Primary subtalar arthrodesis for these fractures and severely comminuted fracture calcaneum has gained acceptance in recent years. However, few definite predictors of functional outcome after primary fusion have been found. We reported a collection of cases with talus fractures ( Hawkins III and IV) following primary subtalar fusion using external fixator without restricted range of motion.

## **METHODOLOGY**

A series of 5 patients with talus fracture Hawkin type 111 and 1V were studied to determine the fusion period, weight bear, complications of external fixator, radiographic parameters, and functional outcome using AOFAS Ankle- Hindfoot Scale. The American Orthopaedic Foot and Ankle Society Ankle-Hindfoot scale score was obtained at 8-12 months after arthrodesis. Radiographic signs of fusion and Hawkins signs were recorded.

## **RESULTS**

Subtalar for all patient's were raw and external fixator in compressed subtalar joint applied. All external fixator was removed on follow up 6 weeks without signs of infection or loosening and started on physiotherapy. All patients were allow for partial to full weight bearing at 3 months. No patient had nonunion. All subtalar fusion united with range 3-6 months. Only one patient had signs of ankle arthritis. 2 Patients have Hawkin signs on radiograph. The mean Ankle-Hindfoot scale score was 78 (range 56 to 92), and the mean visual analog score was 1 (0-2).

## **CONCLUSION**

The results of the present study suggest that the outcomes after primary arthrodesis of the subtalar joint for advance type of talus fracture using external fixator are favorable.

## **KEYWORDS**

Primary subtalar fusion, talus fracture, Hawkins classification