LATERAL TALAR BODY FRACTURE FIXATION VIA A FIBULA DOOR OSTEOTOMY : OUR EXPERIENCE

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Introduction: Surgical access to the posterolateral talar dome to restore articular congruity often requires a fibula osteotomy and division of the anterior-inferior tibiofibular ligament(AITFL) and anterior talofibular ligament(ATFL). This may present with significant morbidity if botched. We present our experience in handling such a case.

Discussion: 30 years old gentleman slipped and fell from 3 stories height and sustained a closed left avulsion fracture of medial malleolus and comminuted fracture of left lateral talus body. He underwent open reduction and headless compression screw(HCS) fixation with a left fibula osteotomy which necessitated repair of AITFL and ATFL with anchor sutures and locking plate over the fibula. For the medial malleolus, hook plating was done and deltoid ligaments repaired using anchor sutures. Post operatively backslab applied for 2 weeks till wounds healed. Strict NWB ambulation for 8-12 weeks and applied a removable boot to allow ROM. Many authors have reported using a medial malleolus osteotomy approach to fix a talar body fracture, however in our case, the fracture was located over the lateral talus body. The patient also had a medial malleolus avulsion fracture, so the best approach was via a fibula door osteotomy. A fracture was created around 5cm from the distal tip of fibula after detachment of AITFL and ATFL. The comminuted fracture site was clearly visualized and fixed using HCS. Although the fracture did not cross over to the medial side of the talar body, adequate compression was achieved with the HCS and post operative images shows a congruent tibiotalar joint.

Conclusion: The fibula door osteotomy is a useful method to visualize and fix lateral talar body fractures. However, in our case further follow up is still required to know if the thin comminuted fracture over the lateral talus will lead to a positive Hawkins sign or even avascular necrosis.