

BRINGING HEMI-CASTAING BACK TO THE LIMELIGHT: A COST EFFECTIVE TECHNIQUE FOR AUGMENTATION IN CHRONIC LATERAL ANKLE INSTABILITY

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Introduction: Chronic lateral ankle instability (CAI) is recurrent ankle sprain and instability for at least 6 months after conservative treatment. Treatment modalities are anatomical repairs (ligament suturing) and non-anatomical repairs (tendon rerouting).

Discussion: 35 years old lady presented with right ankle pain post motor vehicle accident 6 months prior. She fell in right ankle in inversion and sustained right ankle sprain. She was immobilised for a month and sent for physiotherapy, however pain persisted. Clinically, Anterior Tibiofibular Ligament (ATFL) region tender and anterior drawer's test positive. MRI revealed ATFL tear. Initially, Brostrom Gould technique planned, however poor quality of ATFL anticipated which would be impossible to hold the ligament with anchor suture. Patient also had financial constraints. Therefore, proceeded with Hemi-castaing for augmentation alongside with Gould Modified anatomical repair. Incision made over lateral ankle. Peroneus brevis tendon identified and longitudinally split. One of the hemitendons separated 8 cm from its insertion point. A hole is drilled at the distal part of lateral malleolus. The freed hemitendon is passed through the tunnel back to front and sutured to itself distally while ankle maintained in dorsiflexion and eversion. Gould Modified repair done using the subperiosteal flap at the distal fibula. The inferior extensor retinaculum (IER) is pulled over the poor remnants of ATFL and reinforced to the flap. Postoperatively, ankle brace applied and advised for 6 weeks non-weight bearing ambulation. Patient's ankle pain improved drastically, and wound healing was uneventful.

Conclusion: Although studies show non-anatomic repair with peroneus brevis tendon been abandoned as it concerns the ankle instability especially when ATFL remnant is not feasible, Hemi-castaing can be used for augmentation alongside with anatomical repair which is cost effective. Harvesting half the peroneus brevis tendon does not impair eversion force of peroneus brevis muscle.