

TIBIOTALAR AND TRANSYNDesmOTIC SCREW FIXATION ARTHRODESIS

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Introduction: Disruption of the distal tibiofibular syndesmosis is almost always associated with ankle fracture and subluxation due to rotational force such as pronation-supination. Treatment for open ankle injury is challenging in condition where there is significant bone loss after surgical debridement.

Discussion: We are reporting a case of 33 years old gentlemen who sustained open dislocation left ankle with syndesmotoc injury, concurrent with closed fracture proximal 3rd left fibula. Emergency wound debridement, cross ankle external fixation and screw fixation of the syndesmotoc joint was done, however, the result was not satisfactory. Due to non-permissible wound and patient's condition, revision surgery was not done. After serial follow ups at our clinic, patient had persistent ankle instability and unable to weight bear. A diagnosis of chronic syndesmotoc injury was established after 4 months and proceeded with open tibiotalar and transyndesmotoc screw fixation arthrodesis with bone graft insertion. Post operatively, physiotherapy for range of motion was commenced after 1 month and subsequently partial weight bearing ambulation was allowed after 2 months. We are still following up this patient at our clinic for functional outcome of his left ankle.

Conclusion: Chronic syndesmotoc injury is defined as persistent widening of syndesmotoc joint for more than 3 months¹. The aim for arthrodesis is to reduce pain and hence, allowing weight bearing for the patient. Autologous bone graft is incorporated due to significant bone loss and to avoid risk of non union. It gives successful osseous healing by having osteoconduction, osteoinduction, and osteogenesis properties. Although there are various techniques described for ankle arthrodesis, there is still no gold standard for the management of chronic disruption of the ankle syndesmosis². We believed that open screw fixation arthrodesis with autologous bone graft insertion is beneficial for patient with significant bone loss for better functional outcome by reducing the risk of non union.