Fracture-Dislocation with Subtle Complete Ankle Ligamentous Disruption (Medial and lateral).
Case Report

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Said, M.N., For Dr. Vache

My disclosure is in the Final AOFAS Program Book. I have no potential conflicts with this presentation.
• Introduction: Subtalar dislocations are a rarity. We report a case of medial subtalar dislocation with talar body fracture and associated ankle lateral and medial collateral ligament injury.
Results: The injury was sustained by a heavy worker as a result from fall from 3 meter height. At the Emergency Department clinical and radiological assessment revealed no distal neurological or vascular compromise. Urgent reduction was done and the foot was splinted in below knee slab. After preoperative optimization patient underwent ORIF of talus through medial malleolar osteotomy. Intraoperatively through medial incision the deltoid ligament was found to be completely avulsed from the medial malleolar attachment. After fixing the talus the deltoid ligament was reattached using sutures-anchors. Intraoperatively under image intensifier the alignment of the ankle and subtalar joint was fine away from slight varus tilt of the talus. Postoperative x-rays showed well aligned fractures, nevertheless ankle joint appeared incongruent, with significant varus deformity. The second surgery was performed. It reveals the rupture of ankle's lateral ligaments. The repair was done with suture-anchors. After the repair the varus malalignment was corrected and joint became congruent. Despite the severity of injury and multiple incisions, the patient had uneventful recovery.
• Figure 1
• Preoperative X-rays
• Figure 2:
• Intraoperative after anchor suture repair of the deltoid ligament

• Figure 3:
• In slab the talar tilt became apparent. It reflected lateral ligament injury
• Figure 4:
• After ancor suture of lateral collateral ligament
• Conclusion:
  • Thorough clinical examination during subtalar fracture dislocation is often impossible due to significant swelling and pain. Moreover, the diagnostic modalities such as MRI are not routinely included in preoperative assessment of these injuries. We suggest that high level of suspicion should be kept for ankle's total ligamentous injuries during medial subtalar fracture-dislocations. Also we suggest that doing MRI scan could be helpful for preoperative assessment of these injuries.
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