FLEXOR HALLUCES LONGUS ENTRAPMENT IN FRACTURED TALAR BODY HAMAD GENERAL HOSPITAL DOHA. QATAR

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Flexor Halluces Longus entrapment in fractured talar Body

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My disclosure is in the Final AOFAS Program Book. I have no potential conflicts with this presentation.
INTRODUCTION

30 years old male Driver was presented to accident and emergency department after MVA. head on collision. His foot was impacted against the pedal. He was presented with severe foot pain and inability to bear weight. His big toe was in flexion and he was unable to extend his big toe as in fig 1.
He was cleared from other injuries by the trauma team in E.R. department. His ankle was swollen and there were tenderness over the ankle joint and mid-foot. The fixed flexion position of the big toe was at the metatarso-phalangeal joints and to a lesser extent at the inter-phalangeal joint. The fixed flexion position of the big toe was not correctable. There were slight flexion at the inter-phalangeal joints of the lesser toes which was correctable.

Plain X ray of his ankle showed fracture of Talar body with poster-medial dislocation of the talar body Fig 2.
Our diagnosis was flexor hallucis longus entrapment, due to Talar body fracture the proximal fragment which was displaced and rotated, with respect of anatomy we see that FHL come in close approximates with medial surface as we see in the figure 3 below.

Medial aspect of the talus
1- facet for Medial malleolus
2- medial (deltoid) ligament, deep component
3- entrance to sinus tarsi
4- posterior annular ligament (roof of the canal of the flexor hallucis longus tendon)
5- superficial component of medial ligament attached to talar neck
This will displace the tendon and lead to shortening of the functional length of FHL Tendon which will lead to flexion deformity of PIP joint of the big toe and flexible limitation of extension of the same joint. it is Checkrein deformity.
DISCUSSION

FHL entrapment was described previously as checkrein deformity of the big toe. It was reported with fracture calcaneum (5), unusual complication associated with a closed Salter-Harris Type II ankle fracture (2), and as a late presentation after talar fractures (1). To our knowledge, Chekrien deformity of the big toe as primary presentation of acute fracture body of talus has not been reported.

In our patient, Checkrein deformity of the big toe, and associated swelling of the ankle joint was the first sign raising the suspicion of Talar body injury.

Patient was taken to the theatre on an emergency basis. Intra-operatively through antero-lateral approach we found that the FHL tendon was entrapped between talar body fracture fragments. The tendon was freed and the fracture fixed by two screws size 4.5 mm cannulated from posterior to anterior Fig.

Patient was followed up for 2 years and show complete healing with no evidence of AVN.
REFERENCE


2-Checkrein deformity—an unusual complication associated with a closed Salter-Harris Type II ankle fracture: a case report. Foot Ankle Int. 1999 Sep;20(9):591-4.

3-Checkrein deformity—flexor hallucis tethering: two case reports. Foot Ankle Int. 2002 Sep;23(9):799-800

4-Hallux flexus deformity due to entrapment of the flexor hallucis longus tendon after an open fracture of the tibia and fibula. Foot and Ankle Surgery Volume 6, Issue 2, pages 133–135, June 2000