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Case Report

Post Traumatic Anterior Sub-talar Dislocation

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Summary

Sub-talar dislocation is a rare condition that accounts for 15% of traumatic talus injuries, and 2% of all the musculoskeletal dislocations. Anterior sub-talar dislocation represent 1% of the talar dislocations according to the Malgaigne classification. The case of a 46-year-old man who fell from the third floor, with reception on the lower limbs, is reported. The radiological investigations revealed anterior sub-talar dislocation without any associated fracture of the neck of the talus, the pelvis or the spine.

Keywords: Post Traumatic Anterior Sub-talar Dislocation

Introduction

Sub-talar dislocations are the most uncommon injuries that account for 15% of traumatic talus injuries, and 2% of all the musculoskeletal dislocations. A case of anterior sub-talar dislocation without posterior tibialis tendon incarceration is reported.

Case Presentation

We report a case of a 46 years old, presented in the emergency room, who has fallen from the third floor with a lower limb reception. The patient was neurologically, hemodynamically and respiratory stable, with a physical examination a swallowed and elongated deformed foot, painful on palpation and mobilization resulting in, total functional impotence (Figure 1).

Figure 1: Clinical aspects of the foot and ankle in a patient with anterior sub-talar dislocation.

The radiograph view revealed anterior sub-talar dislocation (Figure 2).

Figure 2: Radiological aspects of the foot and ankle in a patient with anterior sub-talar dislocation.

Without any associated fracture of calcaneus, pelvis or spine. The patient was sent to the operating room and, under sedation and opiate analgesia, we attempted to reduce the deformed foot with hyphenate directed traction. A CT-SCAN after the reduction was realized which did not show any fracture of the bones of the foot (Figure 3).

Figure 3: Fluoroscopic images in the operating room, after reduction of the anterior sub-talar dislocation, under sedation

The ankle was immobilized in a short leg cast for 6 weeks. Active range-of-motion exercise began after removal of the wires and cast. Full weight bearing was allowed at 8 weeks (Figure 4).

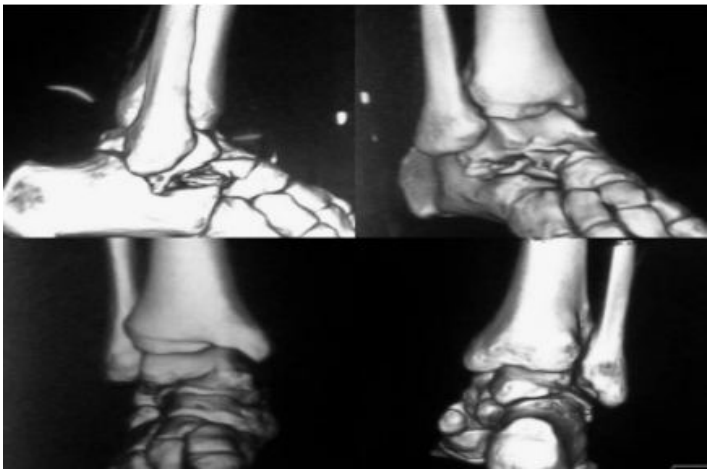

Figure 4: CT images of the foot with the ankle joint, without fractures, after reduction of dislocation.

The patient had no complaints, and had returned to his previous job.

Discussion

Sub-talar dislocations are the rarest injuries that account for 15% of traumatic talus injuries, and 2% of all the musculoskeletal dislocations. Anterior sub-talar dislocation represent 1% of the talar dislocations according to the Magazine classification [1-6]. Medial sub-talar dislocations are most frequent, followed by lateral, posterior, and anterior dislocations in decreasing order [1-4,7-10]. Zimmer and Johnson reviewed eight series comprising 115 cases and found only one case of anterior sub-talar dislocation [8]. Inokuchi et al. described four cases of anterior dislocation, but there was no anteroposterior radiograph view to confirm the diagnosis [11]. A diagnosis of anterior sub-talar dislocation can be confirmed by an anteroposterior radiograph. Inokuchi et al. and Kanda et al. each reported one case of anterior dislocation with anteroposterior radiograph view confirmation [11, 12]. In these two cases, closed reduction was successful.

Conclusion

Sub-talar dislocations are rare, but serious injuries that can evolve to the sub-talar arthrosis. Anterior sub-talar dislocation is

the most uncommon variety. This injury is usually due to high-energy trauma. Early diagnosis and urgent reduction are the keys for a satisfactory functional outcome [13].

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