



A tibiotalar dislocation without disruptions of tibiotalar syndesmosi scan the reexist?

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ABSTRACT

Dislocation of the tibiotalar joint without fracture or diastasis is a rare injury. We report a case of a close posteromedial ankle dislocation, without fracture in a 18 old soccer player, with good results after an orthopedic treatment.

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Keywords

Dislocation, Tibio-talar, Syndesmosis, Soccer player.

Introduction

The ankle joint has a very robust architecture, strengthened and stabilized by a very powerful capsule and ligaments. [1] For this, the dislocation of this joint requires high energy trauma and are frequently seen in young athletes.

We report the case of a young footballer who presented a pure dislocation of the right ankle without diastasis of the tibiofibular syndesmosis.

Clinical case :

This is an athletic young, 18 years old who had an accident at football. Causing trauma in his right ankle. The initial clinical examination found a deformed ankle with increased anteroposterior diameter. Without skin opening.

Vascular examination was difficult to accomplish, given the importance of the strain and pain. A simple radiography was performed in emergency, which showed a posteromedial dislocation of the tibiotalar without fracture or opening of the tibiofibular syndesmosis (Figure 1). A reduction maneuver "tear of boot" was performed under general anesthesia in emergency and post-immobilization splint was originally performed. After the radiography (Figure 2), the neurovascular examinations showed no abnormality and a plaster boot for six weeks has been crafted. The therapeutic result was excellent with a cover sports at 6 months.

Discussion:

Pure dislocation of the ankle without fracture or opening of the tibiofibular syndesmosis is a rare lesion. The first documented case was reported by Peraire in 1913 [2] and a review of the literature in 1939 by Wilson et al reported 16 patients [3] for several sporadic cases have been described [4, 5, 6, 7, 8, 9].

Ligamentous structures are stronger than the malleoli which explains the usual combination of fracture and dislocation of the ankle. The latter requires a large force trauma. Literature classifies pure dislocation of the ankle in 5 types based on the direction of movement [5, 10].

Fernandes [11] showed on cadaveric studies dislocation of the ankle without fracture can reproduce with the version and inversion mechanisms associated with maximum plantar flexion. The talus has a rhomboid shape on top view with a rear portion

most narrowed relative to the anterior. Therefore, in a position of maximum plantar flexion the narrowest part is found in the mortise tibiofibular which gives a very unstable position favoring dislocation.



Fig 1a



Fig 1b

Figure 1a and b: X-ray of the right ankle and face profile objectifying a pure posteromedial dislocation

Dislocations tibiotalar pure skin may accompany opening in 50 % of cases [4,5] be immediately due to trauma or secondarily after dermal necrosis.

Moehring [7] and Shearer [12] reported 2 cases of amputation vascular cause. In our case there was no sign of ischemia and monitoring has not objectified vascular complications.

In a study of 73 cases Garbuio [6] found five nerve damage associated with tibial- fibular dislocation. The frequency of neurovascular lesions in the literature has been estimated at 10% [9] ranging from simple elongation until complete rupture.



Figure 2: X-ray of the right ankle after reduction.

The treatment of ankle dislocation without fibular pure tibiofibular diastasis must be urgently under anesthesia. The reduction is usually easy using the maneuver "tear of boot". Then the authors recommend to search for associated injuries to treat each case. [13] An immobilization boot cast for 6 to 8 weeks gives satisfactory results [13]. Closed dislocations have a good long-term prognosis [4,8].

Some authors have cited poor prognostic factors are: age, presence of vascular injury, the open, late reduction, skin necrosis and infection [6, 8, 14].

Elisé [4] with a mean of 11 years reported 25% and 25% persistent paresthesia and design osteoarthritis. By ligamentous laxity against residual are rare.

Conclusion

Pure dislocation of the ankle without opening the tibiofibular syndesmosis are rare and usually occur in the context

of violent trauma. Closed injuries without neurovascular injury are good prognosis, and treatment is generally orthopedic with good therapeutic results.

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