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Subtalar Dislocation

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Figure 1. Right foot of a 26-year-old male with a medial subtalar dislocation

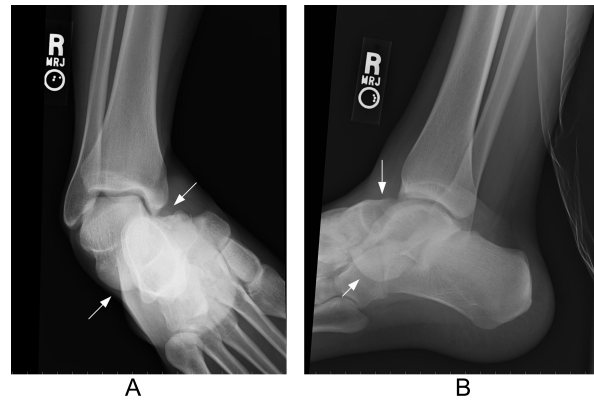


Figure 2. Anteroposterior (panel A) and lateral (panel B) radiographs of the right ankle from a 26-year-old male, demonstrating a medial subtalar dislocation.

A 26-year-old male presented to the emergency department for right foot pain and deformity after inverting his foot while base running playing baseball. Examination revealed a medial deformity of the right foot (Figure 1). The foot was neurovascularly intact without wounds. Radiographs of the ankle demonstrated a medial subtalar dislocation (Figure 2). The dislocation was reduced using procedural sedation with longitudinal-lateral distraction of the foot, resulting in anatomic reduction of the talocalcaneal and talonavicular joints. The patient was placed in a short leg splint, instructed to remain non-weight-bearing on the right foot, with follow-up in the orthopedic clinic the following day.

Subtalar dislocations are rare injuries accounting for approximately 1% of all dislocations.¹ They result from high-energy trauma (e.g., fall from a height or a motor vehicle collision), and certain athletic injuries.¹ Inversion of the foot results in a medial subtalar dislocation (80-85% of these injuries), whereas eversion produces a lateral dislocation.^{2,3} In either case, the talonavicular and talocalcaneal joints are involved simultaneously, while the tibiotalar and calcaneocuboid joints remain intact.³ Optimal management of subtalar dislocations is immediate closed reduction with procedural sedation.¹⁻³ Medial dislocations have a better prognosis compared to lateral, anterior or posterior injuries,

which are often associated with fractures, require open reduction and fixation, and frequently result in instability and arthritis.¹ A CT scan is sometimes recommended to evaluate for associated osteochondral lesions, although these are uncommon with medial dislocations.^{1,2} Following reduction, the foot should be immobilized with a short leg cast for 4-6 weeks with the patient remaining non-weight-bearing.³

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REFERENCES

1. Wagner R, Blattert TR, Weckbach A. Talar dislocations. *Injury*. 2004; 35: SB36-SB45.
2. Jerome JTJ, Varghese M, Sankaran B. Anteromedial subtalar dislocation. *J Foot Ankle Surg*. 2007; 46:52-54.
3. Biswas S, Murphy M. Subtalar dislocations. *Internet J Orthoped Surg*. 2006; 3:1-5. Available at <http://www.ispub.com/ostia/index.php?xmlFilePath=journals/ijos/vol3n2/subtalar.xml>. Last accessed July 16, 2008.