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Figure 1. Lateral radiograph taken shortly after arrival and prior to reduction attempts.

Figure 2. Radiograph taken shortly after arrival and prior to reduction attempts.

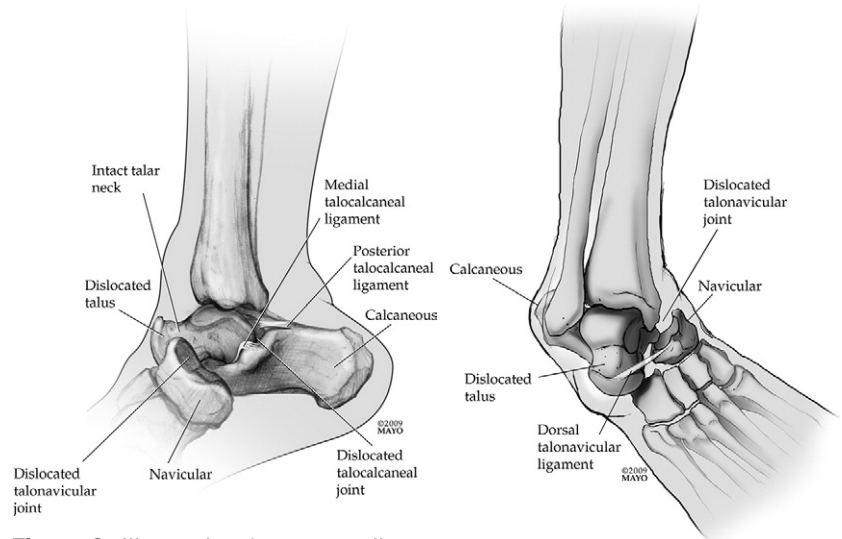


Figure 3. Illustration (corresponding to radiograph seen in figure 1). Also depicted are the medial and posterior talocalcaneal ligaments. Copyrighted and used with permission of Mayo Foundation for Medical Education and Research.

Figure 4. Illustration (corresponding to radiograph seen in figure 2). Copyrighted and used with permission of Mayo Foundation for Medical Education and Research.

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A previously healthy 51-year-old man presented to the emergency department after jumping to “spike” a volleyball and landing on an inverted right foot. At the scene, the patient had experienced immediate pain and a lateral deformity of his right ankle. He was unable to bear weight (Figures 1 and 2).

*For the diagnosis and teaching points, see page 521.
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29. Pedersen CA, Schneider PJ, Scheckelhoff DJ. ASHP national survey of pharmacy practice in hospital settings: dispensing and administration—2008. *Am J Health Syst Pharm.* 2009;66:926-946.
30. Hayes BD, Donovan JL, Smith BS, et al. Pharmacist-conducted medication reconciliation in an emergency department. *Am J Health Syst Pharm.* 2007;64:1720-1723.
31. Fairbanks RJ, Hildebrand JM, Kolstee KE, et al. Medical and nursing staff highly value clinical pharmacists in the emergency department. *Emerg Med J.* 2007;24:716-718.
32. Cohen V, Jellinek SP, Hatch A, et al. Effect of clinical pharmacists on care in the emergency department: a systematic review. *Am J Health Syst Pharm.* 2009;66:1353-1361.
33. Joint Commission. 2008 National patient safety goals hospital program. Available at: <http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/08nspgs.htm>. Accessed February 10, 2009.
34. Schenkel S. The unexpected challenges of accurate medication reconciliation. *Ann Emerg Med.* 2008;52:493-495.

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DIAGNOSIS

Medial subtalar (talocalcaneal) dislocation. Subtalar dislocation is an uncommon injury in which the talocalcaneal and talonavicular joints are dislocated simultaneously, without a fracture of the neck of the talus (Figure 3).¹ The injury is usually a result of a high-energy mechanism, such as a motor vehicle crash or a fall from height. However, this injury has been reported during low-energy inversion injuries such as the one described above. The talocalcaneal and talonavicular ligaments are responsible for transmitting weight between the foot and the ankle and are stressed when a forceful inversion injury causes the talus to pivot on the sustentaculum tali, leading to a medial subtalar dislocation (Figure 4). Failure to reduce properly may result in damage to the talocalcaneal and talonavicular ligaments. Appropriate reduction procedure includes adequate sedation, providing in-line traction, and initially maintaining the foot in plantar flexion. Abduction should then be applied to the foot while everting and dorsiflexing the foot.²

REFERENCES

1. DeLee JC, Curtis R. Subtalar dislocation of the foot. *J Bone Joint Surg.* 1982;a64:433-437.
2. Syed AA, Agarwal M, Dosani A, et al. Medial subtalar dislocation: importance of clinical diagnosis and distinguishing from other dislocations. *Eur J Emerg Med.* 2003;10:232-235.