

Supination-eversion Fractures stage 2 of the Ankle- Conservative treatment is a reasonable Option?



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Abstract

In the present paper, the author presents his criteria regarding the management of supination-eversion stage 2 injuries of the ankle.

Supination-eversion fractures stage 2 of the ankle. Conservative treatment is a reasonable option?

Fractures of the ankle are a very common injury. However, there is still much controversy regarding conservative versus operative treatment and the effectiveness of each modality. Ankle fractures have been classified in many ways, based on the number of affected malleoli, stability, mechanism of production and the state of syndesmosis as the main item to consider the decision between conservative treatment and surgery. Lauge-Hansen classification [1] attempts to associate patterns specific to the fracture at mechanism of injury. This is a two-part system in which the first word denotes position of the foot at the time of injury and the second indicates the direction of the deforming force. This classification divides the mechanisms joint injuries of the ankle in four categories main: supination-adduction, supination-eversion (supination-rotation external), pronation-eversion (pronation-external rotation) and pronation-abduction. Besides, the severity of injury is classified as stage 1, 2, 3 or 4 depending on the configuration.

In this paper, only the eversion stage 2 ankle supination fractures will be addressed.

Supination-Eversion (SE) fractures are the most common of all ankle fractures. Supination eversion stage 2 fractures according to the Lauge Hansen classification are characterized by a rupture of the tibiofibular ligament and an oblique fracture of the distal fibula. In a SE-type ankle injury, it is important to ascertain whether the ankle is stable. The intact deltoid ligament in a SE stage 2 injury stabilizes the ankle mortise. Perhaps because of this, SE stage 2 injuries can be managed non-operatively with comparable results to operative management [2-4]. But it is necessary to identify

two different patterns or variants of the distal fibula fracture [5] (Figure 1):

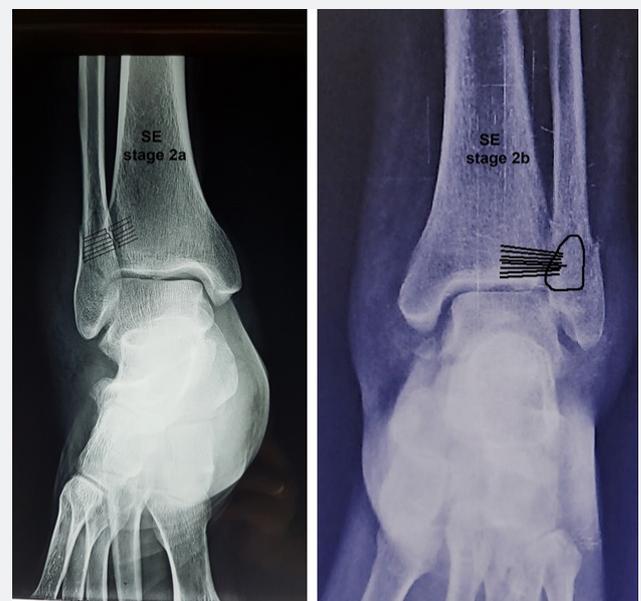


Figure 1: Variants of eversion supination fractures stage 2 of the ankle.

Transsyndesmotom, lateral isolated simple fibular fracture (SE, stage 2a): Rupture of the anterior tibiofibular ligament and a distal isolate oblique fibular fracture.

Transsyndesmotom, lateral isolated multifragmentary fibular fracture (SE, stage 2b): Avulsion fracture of the anterior

syndesmotoc ligament's fibular or tibial insertion (a third fragment) and an oblique fracture of the fibula, starting at the level of the ankle joint and extending proximally from anterior to posterior. Although both variants are stable lesions and can be managed conservatively [6], it should be considered that the third fragment represents the detachment of the tip of the main proximal fibular fragment. This third fragment usually bears some intact portion of the anterior syndesmotoc ligament. It may become entrapped between the main proximal fibular fragment and the lateral malleolar fragment, impeding reduction. The interosseous ligament is not ruptured.

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