Posterolateral Approach for Subtalar Distraction Arthrodesis

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Severely displaced calcaneal fractures in which height and width are not restored will lead to subtalar joint arthritis, lateral impingement, and a decreased talar declination angle, which cannot be successfully corrected via subtalar joint arthrodesis alone. Subtalar distraction bone block arthrodesis is a well-described hindfoot reconstructive procedure for malunited calcaneal fractures with loss of height and varus deformity. Subtalar distraction bone block arthrodesis was first described by Carr et al. This technique involves distraction of the subtalar joint, insertion of a bone block, and rigid screw fixation. This procedure has been well-described in the past with structural iliac crest or autologous bone graft. Early reports of structural allograft did not yield favorable results; however, a study by Monaco et al showed a 100% fusion rate with interposition structural femoral neck allograft in patients treated for a malunited calcaneal fracture. The goal of subtalar distraction bone block arthrodesis is to correct the talocalcaneal relationship and restore calcaneal height.