Case Study
Dr. Reza Firoozabadi

Pilon Fracture
Case information

The patient had a fall from a height and sustained a bimalleolar ankle fracture. She subsequently ambulated on the injured limb while under the influence of meth for roughly one week and this led to impaction of her tibial plafond. Furthermore, she was a cachectic noncompliant Type I diabetic.

Taking into consideration her social history, minimal soft tissue about the ankle joint, impacted comminuted nature of the injury, the EVOS MINI 2.7mm plate system was selected. The variety of plate configurations, low profile, distal screw cluster and variable angle locking screws would allow for an assortment of options in a small area.

Patient information

- 39-year-old Type I diabetic methamphetanime user who presented with a one week history of ankle pain
- Lateral malleolus fracture, medial malleolus fracture, impaction of tibial plafond

Implants

- EVOS MINI 2.7mm Triangle Plate 6H (8H pictured)
- EVOS MINI 2.7mm Y-Tine Plate 5H (8H pictured)
- 3.5mm Cannulated Screw

Procedures

- Placement of ankle spanning external fixator
- Disimpaction of plafond with placement of iliac crest allograft and fixation with EVOS MINI 2.7mm plates
- ORIF medial malleolus
**Procedural notes**

### Procedure

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<tr>
<th>Spanning External Fixator</th>
<th>Disimpaction</th>
<th>Tricortical Iliac Crest</th>
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<th>Lateral with Allograft</th>
<th>Final Mortise</th>
<th>Final Lateral</th>
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Patient is in the supine position with a bump under the ipsilateral hip.

Ankle spanning external fixator was utilized to gain length and neutralize the varus deformity. Then a “mini” anteromedial approach to the tibial plafond was performed. The plafond was disimpacted and held reduced with tricortical iliac crest allograft. Subsequently, the medial malleolus was reduced and a buttress plate and a cannulated screw maintained the reduction. An additional buttress plate was applied to the anterior face of the tibial plafond. Decision was made to not fix the lateral malleolus due to the fact that the ankle would have a propensity to fall into varus and not fixing the fibula would make this less likely. Additionally, her soft tissue and her diabetes placed her at higher risk of infection. However the external fixator was kept in place to provide additional support.

### Results

The patient was discharged to a facility and returned to clinic at six weeks for removal of external fixator, and has not followed up since. At the follow up appointment the incision had healed and her hardware could not be palpated due to the low profile nature.
Dr. Reza Firoozabadi
Dr. Reza Firoozabadi is Assistant Professor at University of Washington/Harborview Medical center and the Director of Orthopaedic Trauma Research at Harborview Medical Center in Seattle, Washington.

Surgeon Quote
“The EVOS™ set is a versatile plating system that can be utilized for a number of different applications. The plates are low profile, provide a number of different configurations, can be contoured and allow for placement of variable angle locking screws.”