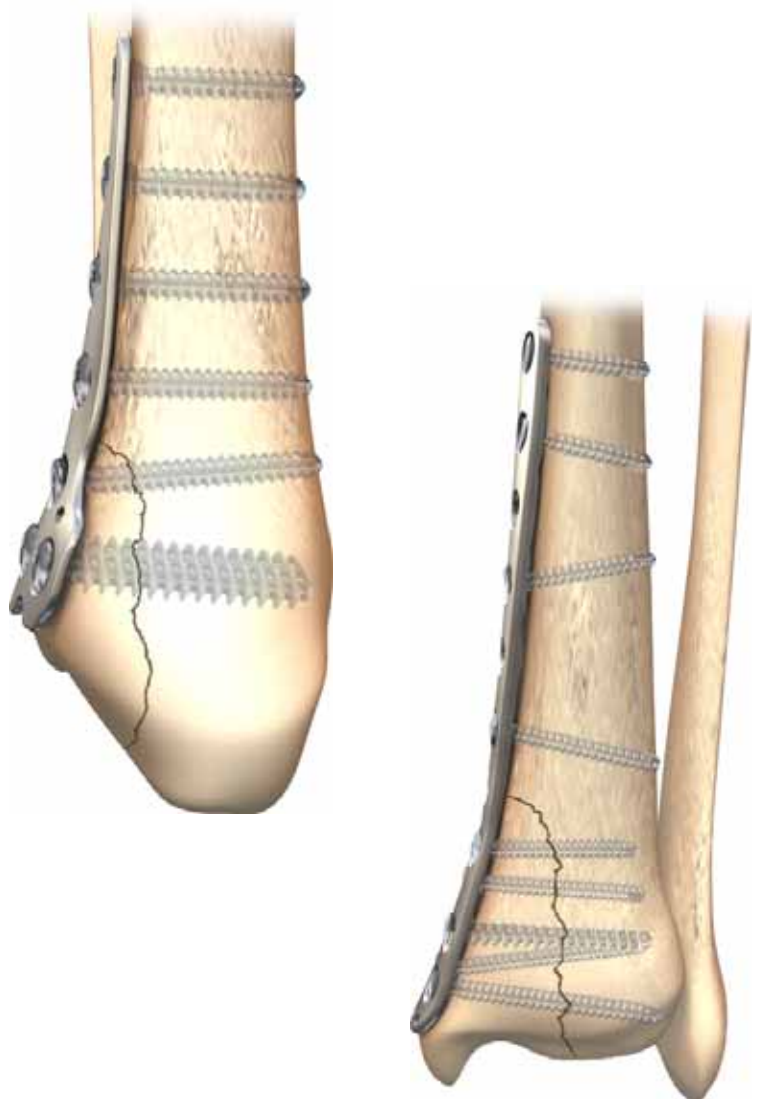


Fracture Specific Plating Solution:  
Tibial Pilon Fracture Management  
Case Study #3



## Patient information

43-year-old male, injured in a fall

Distal fibula fracture

Distal tibia fracture with  
intra-articular component

Radiographs and CT scan  
revealed a large posterior  
malleolus fracture and medial  
distal third tibial comminution



Pre-operative radiographs

## Day of injury

The fracture was closed reduced and an external  
fixator was applied to temporarily span the  
fracture site.

One week after external fixation, the soft tissue  
swelling delayed ORIF of both the tibia and  
fibula fractures.

## Implants

PERI-LOC® VLP 3.5mm Posterior  
Distal Tibia Locking Plate

PERI-LOC VLP 3.5mm  
Posterolateral Distal Fibula  
Locking Plate

PERI-LOC VLP 3.5mm Medial Distal  
Tibia Locking Plate



Post-external fixation CT scans



3.5mm Posterolateral Distal Fibula Locking Plate



3.5mm Medial Distal Tibia Locking Plate



3.5mm Posterior Distal Tibia Locking Plate

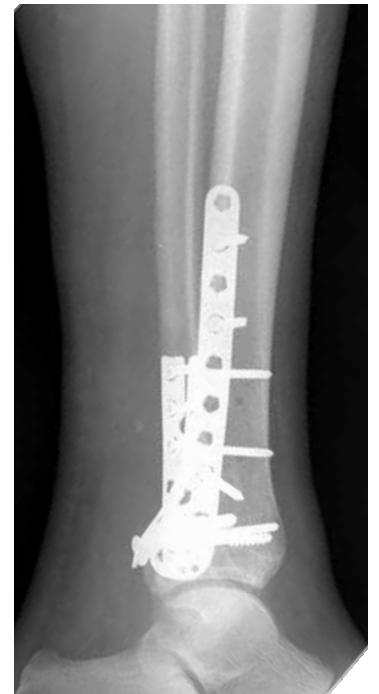
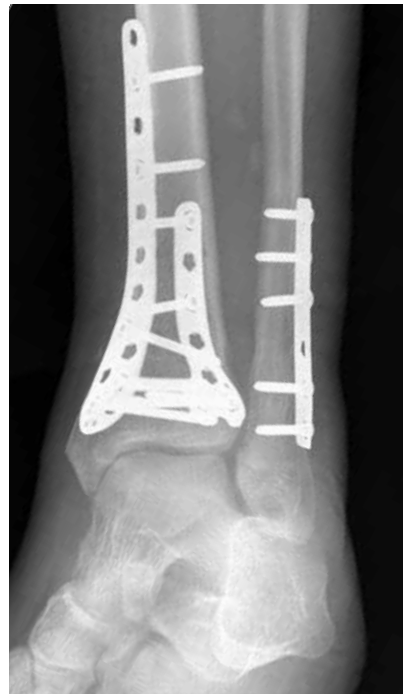
### Procedural notes

#### Patient Positioning – Prone

The external fixator was removed. The fibula and posterior malleolus fractures were addressed through a standard posterior approach between the FHL and peroneal tendons. The fibula was anatomically reduced and a PERI-LOC® VLP 3.5mm Posterolateral Distal Fibula Locking Plate was implanted.

The posterior malleolus was reduced and temporarily held with Kirschner wires while a PERI-LOC VLP 3.5mm Posterior Distal Tibia Locking Plate was applied to buttress the fracture.

The second distal tibia fracture was plated with a PERI-LOC VLP 3.5mm Medial Distal Tibial Locking Plate utilizing a MIPO technique.



Post-operative radiographs

### 3.5mm Posterolateral Distal Fibula Locking Plate

- Scalloped edge allows for placement of syndesmotom screws
- 8° of external rotation at the distal end of plate
- Plate thickness is 1.5mm
- Shaft hole spacing is 12.0mm
- Beveled tip for percutaneous insertion
- Accepts 3.5mm Locking, 3.5mm Cortex and 5.0mm Osteopenia Screws



### Case study participants



#### Gary S. Gruen, MD

Dr. Gruen is a trauma surgeon at the University of Pittsburgh Medical Center (UPMC) and a Professor of orthopaedic surgery at the University of Pittsburgh School of Medicine.



#### Aaron L. Sop, DO

Dr. Sop completed an Orthopaedic surgery residency at Riverside County Regional Medical Center, Riverside, CA in 2007. Currently, he is an Orthopaedic Trauma Fellow at The University of Pittsburgh Medical Center in Pittsburgh, PA.

### 3.5mm Medial Distal Tibia Locking Plate

- Two 1.6mm holes for provisional K-wire fixation
- Plate thickness is 1.5mm
- Shaft hole spacing is 12.7mm
- Seven distal screw holes for joint surface stability
- Beveled tip for percutaneous insertion
- Accepts 3.5mm Locking, 3.5mm Cortex and 5.0mm Osteopenia Screws



### 3.5mm Posterior Distal Tibia Locking Plate

- Scalloped edge allows for placement of independent lag screws
- Two 1.6mm holes provisional K-wire fixation
- Plate thickness is 1.5mm
- Shaft hole spacing is 12.3mm
- Beveled tip for percutaneous insertion
- Accepts 3.5mm Locking, 3.5mm Cortex and 5.0mm Osteopenia Screws



#### Orthopaedic Trauma & Clinical Therapies

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