Exposure and Joint Reduction

- Make incision from the lateral gutter of the ankle towards base of the third metatarsal.
- Continue dissection between the extensor digitorum brevis muscle and extensor digitorum longus tendons down to the sinus tarsi. Be cautious of branches of the superficial peroneal nerve and sural nerve.
- Prepare the subtalar joint for arthrodesis in usual fashion.

Joint Reduction and Reaming

- With subtalar joint held in reduced position, direct 2.0mm guide wire into calcaneus at the anterior border of the posterior facet. Check placement of guide wire (see tips).
- Ream over guide wire with cannulated reamer to desired depth.
- Save harvested bone for subsequent grafting. Distract and prepare remaining subtalar joint.

Cup Insertion

- Place some bone graft between talus and calcaneus.
- Slide Subtalar Fusion Cup over guide wire to desired depth. Align tapered edge toward lateral side of foot.

Note: Placing K-wire through peripheral screw hole may help maintain cup position prior to final fixation.

Screw Placement

- Prepare holes on rim of cup using 2.0mm (yellow) drill. Insert 3.0mm noncannulated screws of appropriate length into talus (superior rim of cup).
- Drill over guide wire with 3.7mm cannulated drill. Measure depth to determine appropriate length of central screw. Remove guide wire.
- Insert 6.5mm non-cannulated self-drilling screw into bottom screw hole of cup and tighten to compress talus to calcaneus.
Final Fixation

- Place 3.0mm screws along the inferior rim of cup into calcaneus.
- Place remaining harvested bone graft around implant between talus and calcaneus.

TIPS

Initial Guide Wire Placement
After exposure and initial joint preparation, place guide wire. Check on C-arm/Fluoroscan.
- Lateral view: Guide wire should be parallel to calcaneal pitch.
- Axial view: Guide wire should bisect calcaneal tuberosity.
Note: If reamer stops abruptly, check guide wire again on C-arm. It might have bent on initial insertion. Replace before continuing.

Subtalar Cup Placement
- Leave Subtalar Fusion Cup Reamer in place to check for positioning prior to cup placement.
Implant made from surgical grade PEEK-OPTIMA®. Screws made from medical grade stainless steel

**Cup**
STF-CUP-S

16.9mm

**STF-Cup Reamer**
RMRSFC-17

cannulated

**3.0 Locking Screw**
NC30xx
10mm to 18mm

**6.5 Compression Screw**
CAB6.5-xx
26mm to 30mm

**XRAYS**

Pre-Op

Post-Op

Surgical technique by Tim Badwey, MD


The technique presented is one suggested surgical technique. The decision to use a specific implant and the surgical technique must be based on sound medical judgment by the surgeon that takes into consideration factors such as the circumstances and configuration of the injury.