

Retro – the way to GO

Retronail
Ankle Arthrodesis Nail

Strength

Simplicity

Stability

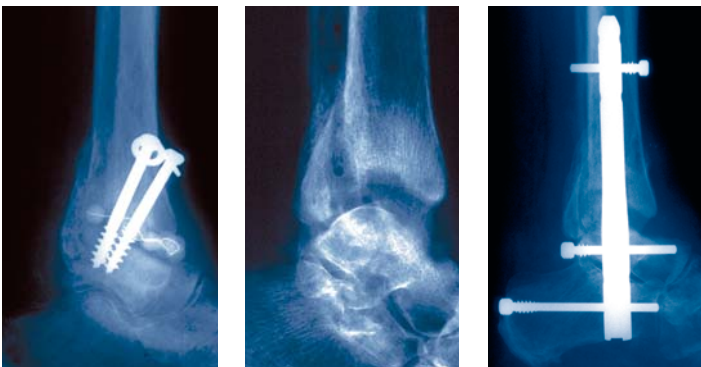


The Retronail Ankle Arthrodesis Nail from Orthofix is indicated for:

- Painful arthritic deformity of the ankle joint with stiffness in the subtalar joint.
- Fractures of the tibial plafond and/or talus where reconstruction is impossible.
- Fracture/dislocations of the ankle joint combined with severe arthritic changes and loss of function.
- Supramalleolar non-union with subtalar stiffness.
- Failed fusion of the ankle joint.

- Posterior-anterior placed locking screws give more stability than medial-lateral screws due to greater bone purchase. Stability is essential for union and to prevent malunion.¹
- The system and straight nail design allow rotation on insertion, easing introduction.
- The nail and unique locking screw design have superior fatigue resistance.²
- The system has a mechanical targeting device that is accurate and easy to use.

Case Study



Infection treated with antibiotic beads.

Infection cleared.

Tibiototalcaneal arthrodesis with Ankle Arthrodesis nail. Time to union: 16 weeks.

Case provided by: D. Pennig, K. Mader and T. Gausepohl, Department of Trauma Surgery, Hand and Reconstructive Surgery, St Vinzenz Hospital, Köln, Germany

Operative Brief

1. Fusion angle of the joint is 90/95° in male/females respectively, 5° valgus, 10°-15° external rotation.
2. Fibulectomy and preparation of articular surface.
3. Entry point is in line with the tibial axis, in the non-weight bearing part of the sole of the foot.
4. Ream over a guide wire to 0.5 mm greater diameter than the nail.
5. In most cases a 10mm diameter nail is used, usually 140/160/180 mm length.
6. Insert nail using handle over a guidewire.
7. Check correct positioning of the locking screw holes using the image intensifier.
8. Insert distal locking screws into the talus and calcaneus from posterior to anterior.
9. Drill proximal locking screw hole from posterior to anterior.
10. Insert proximal locking screw from anterior to posterior.
11. Insert nail end cap.

Retrograde Nails

Total Length (mm)	Nail Diameter		
	10 mm	11 mm	12 mm
140	77014		77214
160	77016		77216
180	77018	77118	77218
190	77019	77119	77219
200	77020	77120	77220
210	77021	77121	77221
220	77022	77122	77222

77900	Retrograde Nail end cap
17700	Supracondylar and Ankle Arthrodesis Nailing kit

Note: For the first 50 mm all nails are 12 mm in diameter; they then taper to the diameter stated.

Standard Locking Screws

6 mm Thread Diameter

Total Length (mm)	Thread Length (mm)		
	8 mm	12 mm	20 mm
30	73930		
35	73935		
40	73940		
45	73945		
50		73950	
55		73955	
60		73960	
65		73965	
70			73970
75			73975
80			73980
85			73985
90			73990
95			73995
100			73900
105			73905
110			73910

Revision Locking Screws

For use in osteoporotic bone, are also available.

References: 1. Mader et al. 2003 Calcaneotalibial arthrodesis with a retrograde posterior-to-anterior locked nail for salvage of severe ankle pathology JBJS Am 85A Suppl 4 123-128; 2. Pennig 1997 An improved screw design for locked intramedullary nailing Injury 28 (2) 162-164