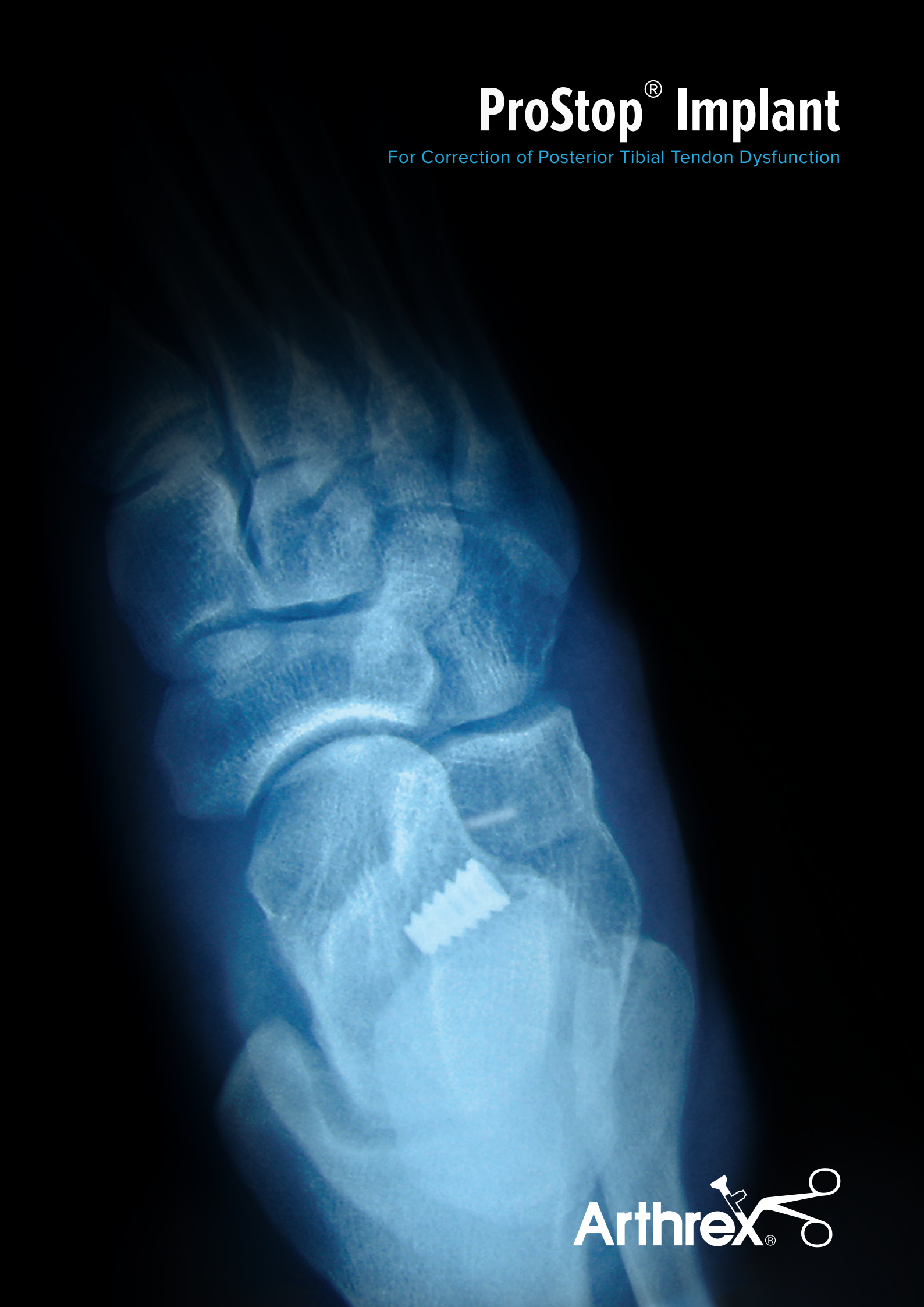
ProStop® Implant

For Correction of Posterior Tibial Tendon Dysfunction



Arthrex®

Introduction

The ProStop® arthroereisis subtalar implant is intended to assist in treating the hyperpronated foot by stabilizing the subtalar joint. The main goal is to block forward, downward, medial displacement of the talus, and to help in reducing the talonavicular joint, thereby limiting excessive valgus of the hindfoot.

Examples include:

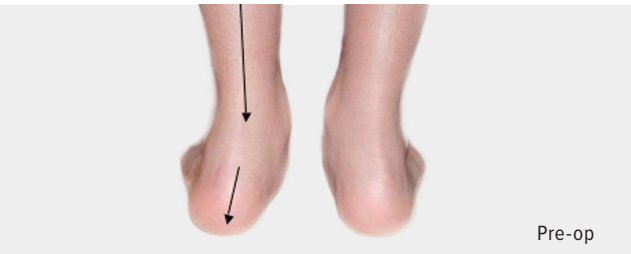
- Posterior tibial tendon dysfunction with flexible deformity
- Symptomatic acquired flatfoot treatment in children and adolescents
- Symptomatic congenital flexible flatfoot
- Tarsal coalitions with better implant-to-bone contact

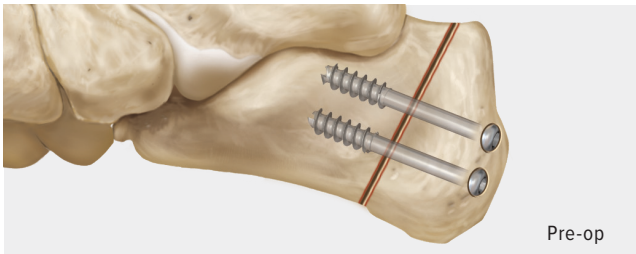
The color-coded and laser-marked instrumentation is easy to use and comes with trial sizers on their own shaft. The concave back end offers the surgeon easier access with a guidewire, in the event the implant requires removal.

ProStop® Implant

Features and Benefits

- Better Fit – Contour of the implant supports the anatomy of the tarsal canal
- Metal or Bioabsorbable – Bioabsorbable option ideal for patients with metal allergies
- Soft threads – easier on bone
- Concave Back – Allows easy guide pin access
- Straightforward Instrumentation – One-piece, color-coded trial implants support easy and accurate placement


Pre-op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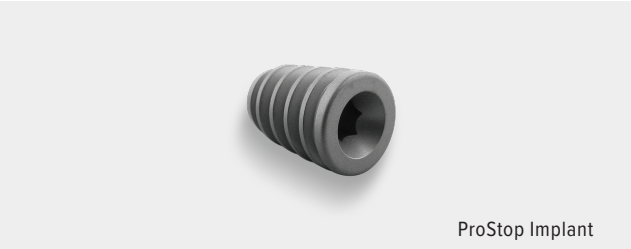
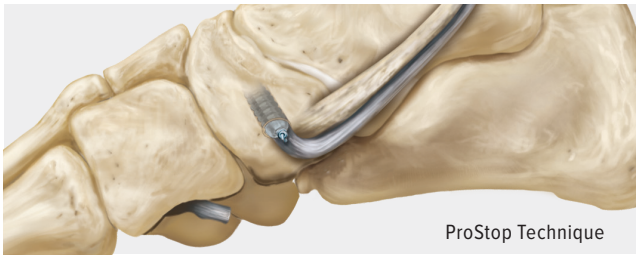
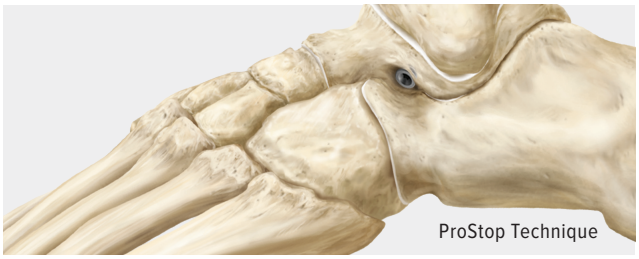
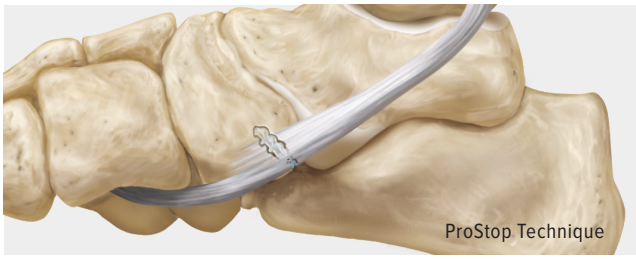
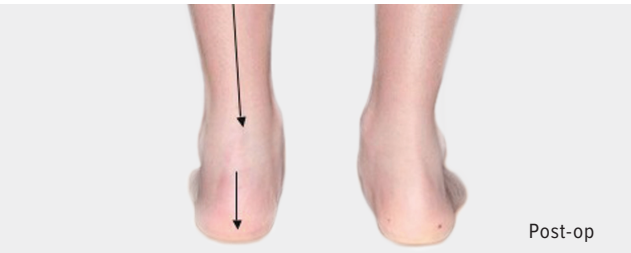
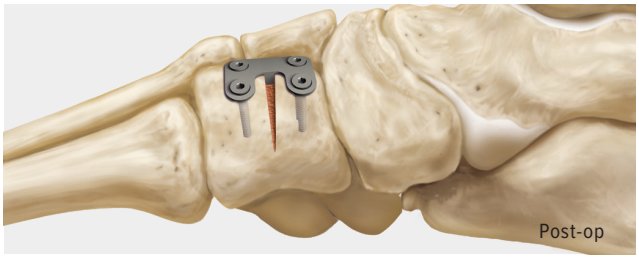

ProStop Implant


ProStop Technique


ProStop Technique


ProStop Technique


Post-op


Post-op

Scientific Rationale

In recent years, numerous scientific investigations have shown promising results with arthroereisis. These include biomechanical and clinical studies from both orthopedic and podiatric literature. Biomechanically, sinus tarsi implants have been shown to improve arch mechanics and alignment, while clinically they have enhanced the results of flatfoot correction.[1-7]

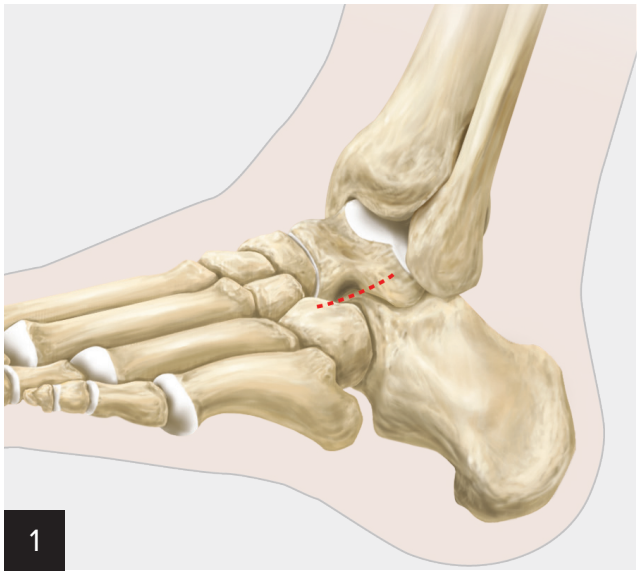
Biomechanical

1. Vora AM, Tien TR, Parks BG, Schon LC. Correction of moderate and severe acquired flexible flatfoot with medializing calcaneal osteotomy and flexor digitorum longus transfer. *J Bone Joint Surg Am*. 2006;88(8):1726-1734. doi:10.2106/JBJS.E.00045.
2. Saxena A, Nguyen A. Preliminary radiographic findings and sizing implications on patients undergoing bioabsorbable subtalar arthroereisis. *J Foot Ankle Surg*. 2007;46(3):175-180. doi:10.1053/j.jfas.2007.01.009.
3. Boberg JS, Oldani T, Martin N. Bioabsorbable implants for flatfoot: can they work? *Podiatry Today*. 2006; 19(9):34-42.

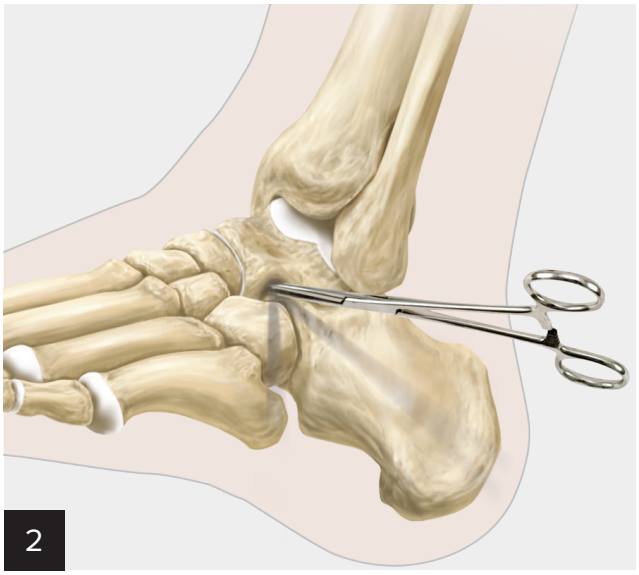
Clinical

4. Needleman RL. A surgical approach for flexible flatfeet in adults including a subtalar arthroereisis with the MBA sinus tarsi implant. *Foot Ankle Int*. 2006; 27(1):9-18. doi:10.1177/107110070602700103.
5. Cicchinelli LD, Huerta JP, Garcia Carmona FJ, Fernandez Morato D. Analysis of gastrocnemius recession and medial column procedures as adjuncts in arthroereisis for the correction of pediatric pes planovalgus: a radiographic retrospective study. *J Foot Ankle Surg*. 2008;47(5):385-391. doi:10.1053/j.jfas.2008.06.002
6. Adelman VR, Szczepanski JA, Adelman RP. Radiographic evaluation of endoscopic gastrocnemius recession, subtalar joint arthroereisis, and flexor tendon transfer for surgical correction of stage II posterior tibial tendon dysfunction: a pilot study. *J Foot Ankle Surg*. 2008;47(5):400-408. doi: 10.1053/j.jfas.2008.06.005.
7. Van Aman SE, Schon LC. Subtalar arthroereisis as adjunct treatment for type II posterior tibial tendon deficiency. *Tech Foot Ankle Surg*. 2006;5(2):117-125. doi:10.1177/107110070302400806.

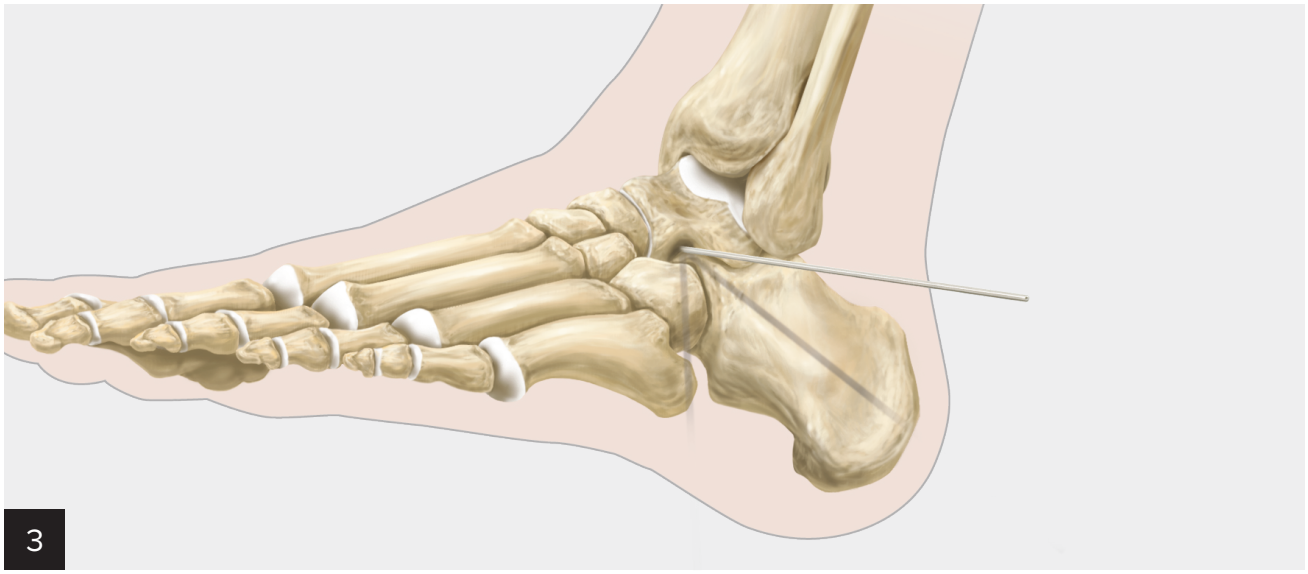
Surgical Technique



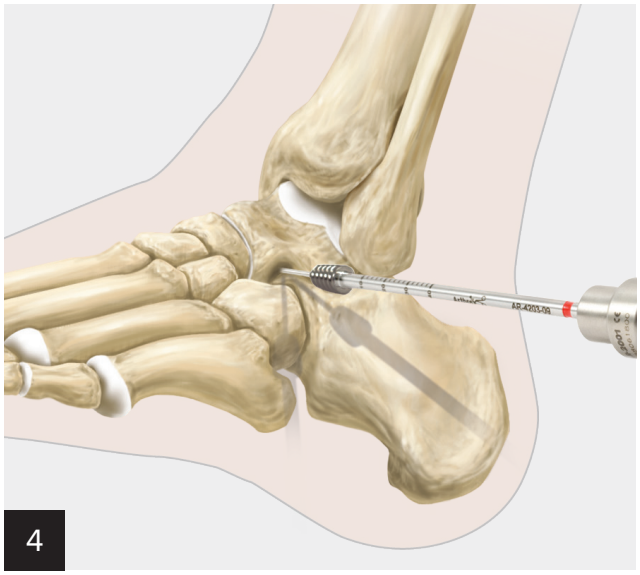
The incision should be made in the “soft spot” just proximal to the anterior process of the calcaneus. Make the incision along the course of the nerve to avoid inadvertent transection of the superficial branch of the peroneal nerve. Alternatively, an incision along the skin lines may be used. In this case, care should be taken to protect the underlying nerve.



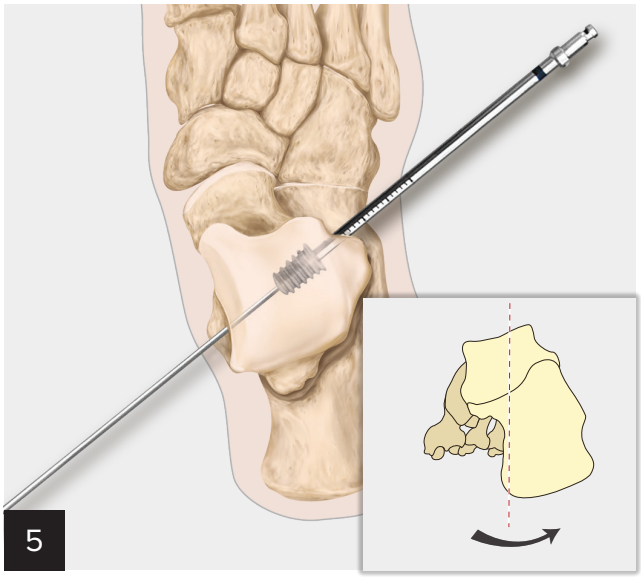
Bluntly dissect the subcutaneous tissues into the tarsal canal with a small hemostat to create a pathway for the guidewire.



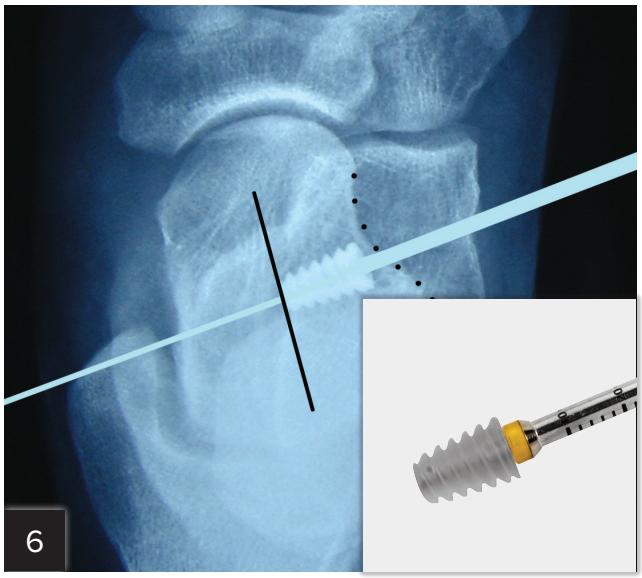
Insert the guidewire through the tarsal canal. This wire passes about 15° off the perpendicular to the sagittal plane going from anterolateral to posteromedial. Aim for the sustentaculum talus medially. The guidewire will tent the skin medially and a 1 mm-3 mm incision can be made here to permit clamping of the protruding wire. The wire will exit below the posterior tibial tendon. Note: A medial incision is not necessary unless an FDL tendon transfer will be performed after insertion of the ProStop implant.



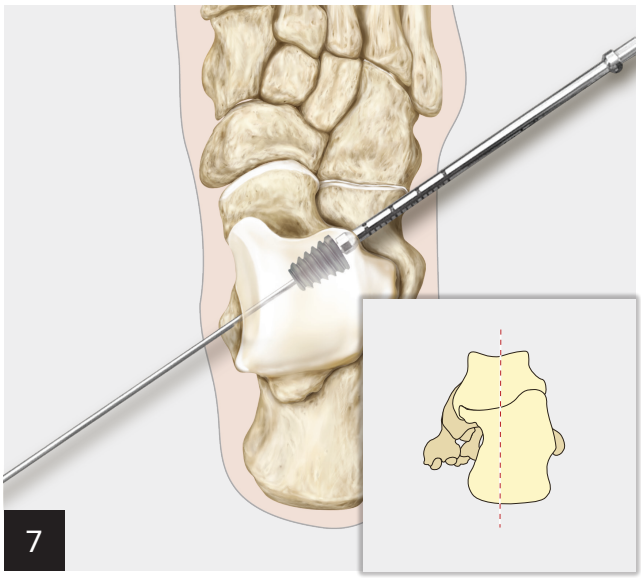
Insert the trial sizer over the guidewire.



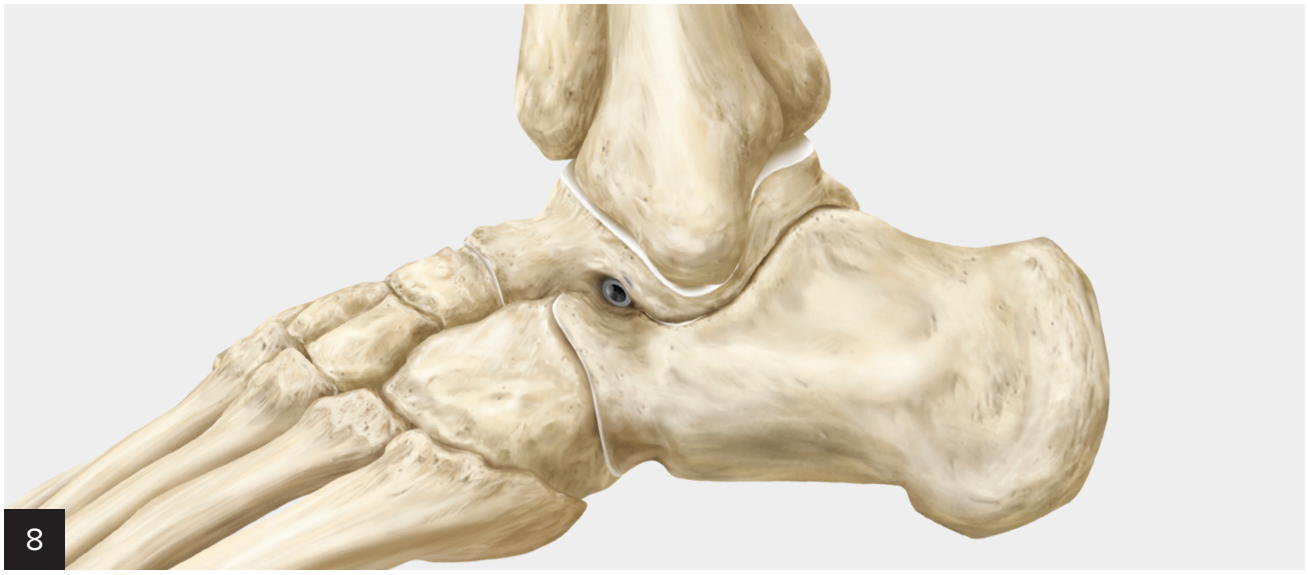
Initial assessment should check eversion of the calcaneus. If too much eversion is present, increase the diameter of the trial sizer and reassess.



AP intraoperative image. Implant/sizer should not be medial to the midline of the talar neck. Once the proper insertion distance has been visualized on fluoroscopy, confirm the distance using the laser marks on the driver and compare against the skin line. The lateral edge of the implant should be at or just medial to the lateral side of the talus.



Insert the implant using the driver from the instrument set. It is suggested to maintain the foot in an everted position while disengaging the screw driver. To confirm final placement, check with fluoroscopy. If satisfactory, remove the guidewire.



Procedure is complete.

Ordering Information

Product Description	Item Number
ProStop® Instrument Set	AR-**4200S**
ProStop Arthroereisis Driver, 3.5 mm hex	AR-**4201**
ProStop Plus T15 Hexalobe Driver, 14 mm	AR-**4201DB-14**
ProStop Plus T15 Hexalobe Driver, 16 mm	AR-**4201DB-16**
Tear Drop Handle	AR-**2001**
ProStop Starter Dilator, 4.75 mm	AR-**4203D**
ProStop Arthroereisis Sizer, 7 mm	AR-**4203-07**
ProStop Arthroereisis Sizer, 8 mm	AR-**4203-08**
ProStop Arthroereisis Sizer, 9 mm	AR-**4203-09**
ProStop Arthroereisis Sizer, 10 mm	AR-**4203-10**
ProStop Arthroereisis Sizer, 11 mm	AR-**4203-11**
ProStop Arthroereisis Sizer, 12 mm	AR-**4203-12**
ProStop Arthroereisis Extraction Tamp	AR-**4205**
ProStop Dilator, 8 mm	AR-**4203D-08**
ProStop Dilator, 9 mm	AR-**4203D-09**
ProStop Dilator, 10 mm	AR-**4203D-10**
ProStop Dilator, 11 mm	AR-**4203D-11**
ProStop Dilator, 12 mm	AR-**4203D-12**
ProStop Arthroereisis Instrumentation Case	AR-**4200C**

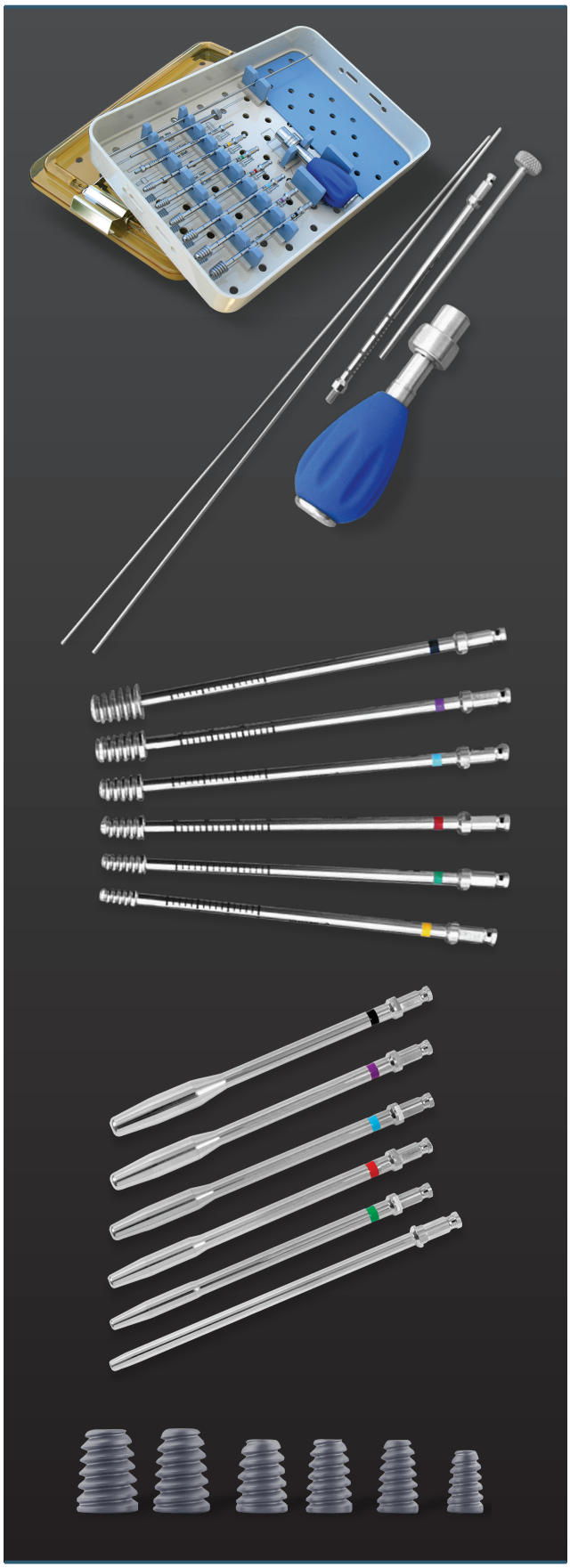
Implants

Product Description	Item Number
ProStop Arthroereisis Implant, 7 mm × 12 mm	AR-**4207-12**
ProStop Arthroereisis Implant, 8 mm × 14 mm	AR-**4208-14**
ProStop Arthroereisis Implant, 9 mm × 14 mm	AR-**4209-14**
ProStop Arthroereisis Implant, 10 mm × 14 mm	AR-**4210-14**
ProStop Arthroereisis Implant, 11 mm × 16 mm	AR-**4211-16**
ProStop Arthroereisis Implant, 12 mm × 16 mm	AR-**4212-16**

Disposables

Product Description	Item Number
ProStop Arthroereisis Guidewire, .078 in (2 mm), qty. 2	AR-**4202**

Products advertised in this brochure/surgical technique guide may not be available in all countries. For information on availability, please contact Arthrex Customer Service or your local Arthrex representative.



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