



AnaToemic Phalangeal Prosthesis

Surgical Technique



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Access

Make a dorsomedial skin incision and a straight capsular incision. Carry out subperiosteal dissection of the soft tissues in a dorsal, lateral and plantar direction.

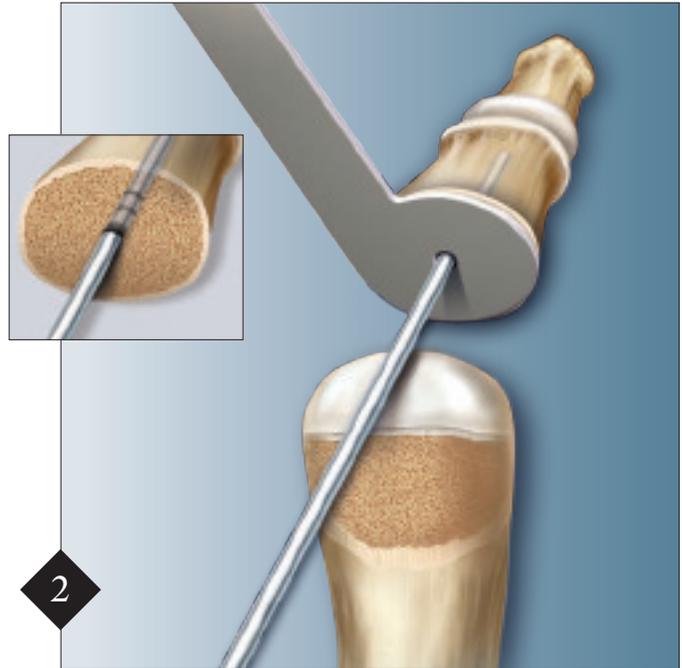
- Spare the insertions of the short flexor muscle of the great toe in order to avoid malalignment postoperatively.
- Expose the sesamoid bones and resect all adhesions between sesamoid bones and metatarsal with the proximal phalanx in maximum plantar flexion.



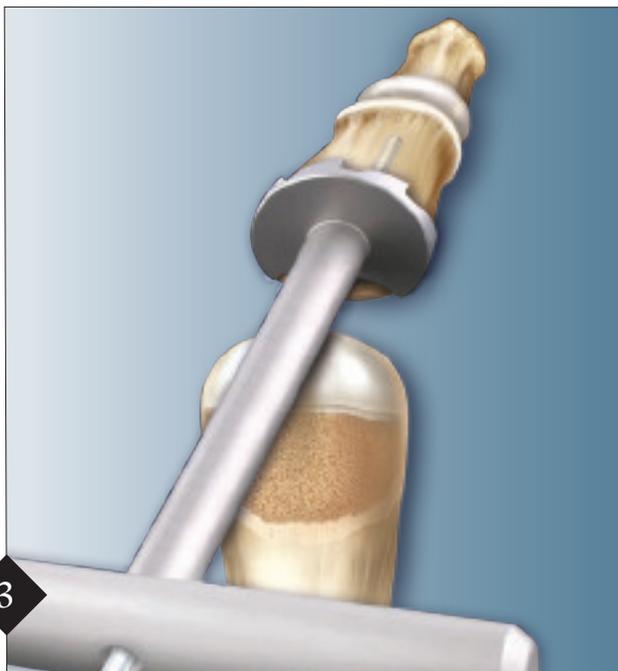
1 Remove all osteophytes from the metatarsal head medially, dorsally and laterally. Using the saw, resect 1 – 2 mm of the proximal phalanx. Take care to preserve the attachment of the flexor tendon. Use an elevator to improve access to the phalanx and protect soft tissues.

Indication

Hallux limitus with cartilage damage to the metatarsophalangeal joint of the great toe and hallux rigidus.



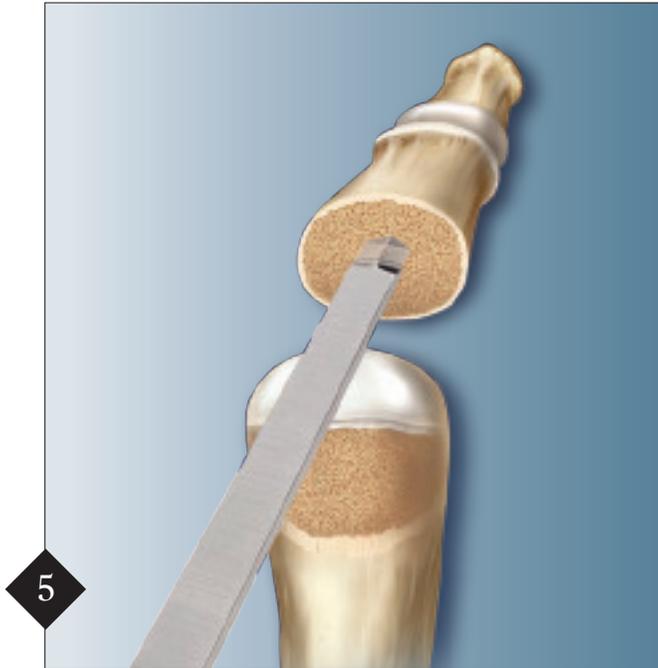
2 Use a gauge to select the best trial prosthesis. Take care to avoid soft tissue impingement due to oversizing of the implant. Through the hole in the gauge insert the 2.8 mm K-wire centrally and parallel to the longitudinal axis of the phalanx. The wire should be inserted to the last laser mark.



3 Resect 2 – 3 mm from the proximal phalanx with the cannulated AnaToemic Reamer over the 2.8 mm guidewire. This will decompress the joint and allow for greater range of motion postoperatively. A reamer that is slightly smaller than the phalanx may help to preserve a plantar cortex for the attachment of the flexor tendon. Reaming depth can be measured using the laser marks on the guidewire. Each line is 2 mm.



4 Implant the trial prosthesis until it is flush with the resected surface of the proximal phalanx. With manual traction on the 1st toe, a gap of 5 – 7 mm between the metatarsal head and trial prosthesis should be present. Take the joint through a trial range of motion. The aim is to achieve 80 – 90° dorsiflexion. If the range of motion is limited or the gap is too small, perform a cheilectomy—in which at least 20% of the joint surface must be resected—and/or resect more from the phalanx.



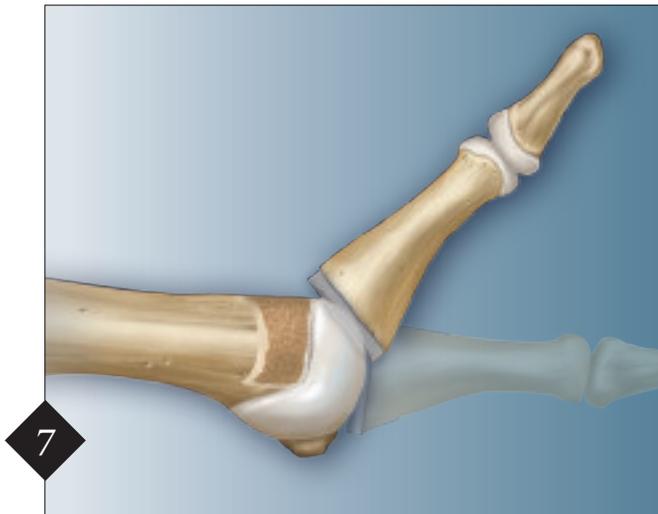
5

Prepare the proximal phalanx with the AnaToemic Punch to ease insertion of the prosthesis. Insert punch to laser line as shown.



6

Insert the cobalt chrome AnaToemic Prosthesis centrally and parallel to the joint surface. Seat the implant with the AnaToemic Driver until the implant is flush with the bone.



7

Confirm the 5 – 7 mm gap between the metatarsal head and prosthesis. Close the capsule without capsulorrhaphy.

Postoperative Treatment

The patient should undergo active and passive exercises from the 2nd postoperative day. A rehabilitation shoe with a stiff sole is recommended during postoperative weeks 1 through 4. From the end of the 2nd postoperative week, intensify the active and passive dorsiflexion exercises, which should be continued until the end of the 4th postoperative month.

Ordering Information

Implants:

AnaToemic Prosthesis, 17 mm	AR-9500-170
AnaToemic Prosthesis, 18.5 mm	AR-9500-185
AnaToemic Prosthesis, 20 mm	AR-9500-200
AnaToemic Prosthesis, 21.5 mm	AR-9500-215
AnaToemic Prosthesis, 23 mm	AR-9500-230

AnaToemic Instrument Set (AR-9500S) includes:

AnaToemic Saw Blade	AR-9500B
AnaToemic Case	AR-9500C
AnaToemic Driver	AR-9500D
AnaToemic Phalangeal Prosthesis Gauge, 17 – 18.5 mm	AR-9500G-S
AnaToemic Phalangeal Prosthesis Gauge, 20 – 21.5 mm	AR-9500G-M
AnaToemic Phalangeal Prosthesis Gauge, 23 mm	AR-9500G-L
AnaToemic Reamer, 17 mm	AR-9500R-170
AnaToemic Reamer, 18.5 mm	AR-9500R-185
AnaToemic Reamer, 20 mm	AR-9500R-200
AnaToemic Reamer, 21.5 mm	AR-9500R-215
AnaToemic Reamer, 23 mm	AR-9500R-230
AnaToemic Trial, 17 mm	AR-9500T-170
AnaToemic Trial, 18.5 mm	AR-9500T-185
AnaToemic Trial, 20 mm	AR-9500T-200
AnaToemic Trial, 21.5 mm	AR-9500T-215
AnaToemic Trial, 23 mm	AR-9500T-230
AnaToemic K-wire, 2.8 mm	AR-9528
AnaToemic Punch	AR-9500P

This description of technique is provided as an educational tool and clinical aid to assist properly licensed medical professionals in the usage of specific Arthrex products. As part of this professional usage, the medical professional must use their professional judgment in making any final determinations in product usage and technique. In doing so, the medical professional should rely on their own training and experience and should conduct a thorough review of pertinent medical literature and the product's directions for use.

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