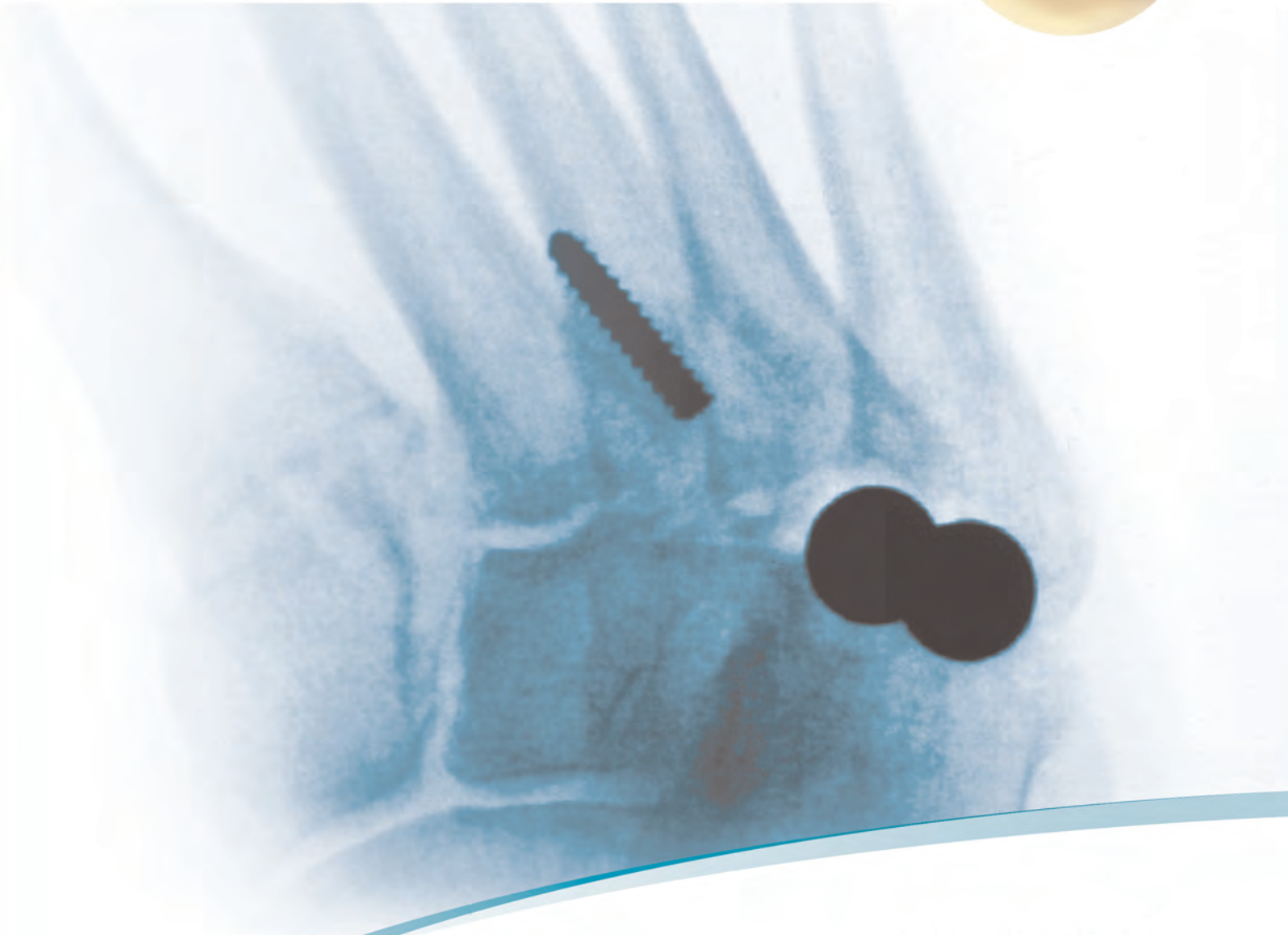


ORTHOSPHERE®

Tarsometatarsal Interpositional Arthroplasty

SURGICAL TECHNIQUE



WRIGHT.


interpositional **ORTHOSPHERE[®]**
ARTHROPLASTY IMPLANT

as described by **Robert Anderson, MD**

ORTHOSPHERE®

tarsometatarsal INTERPOSITIONAL
ARTHROPLASTY

Surgical Technique
as described by Robert Anderson, MD

introduction



FIGURE 1

Degenerative joint disease of the midfoot is not uncommon | FIGURE 1 and may be associated with inflammatory conditions such as gout or pseudogout. When nonoperative modalities (i.e. shoe modifications) fail to provide relief of activity-related discomfort, surgery may be considered. While arthrodesis provides good results with medial column involvement, it limits compensatory motion at the lateral column (4/5 tarsometatarsal joints) of the foot necessary for normal biomechanics and gait. As an option to arthrodesis at that location, soft tissue or implant arthroplasty is recommended.

technique



FIGURE 2

STEP 1 | A dorsolateral skin incision is made over the lateral aspect of the 5th metatarsal and cuboid area | FIGURE 2.

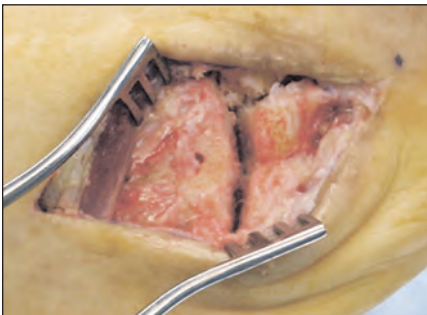


FIGURE 3

STEP 2 | The lateral two TMT (tarsometatarsal) joints are exposed (see note) and the extensor tendons are retracted. Osteophytes are debrided and a synovectomy is performed | FIGURE 3.

NOTE | The ORTHOSPHERE® Interpositional Arthroplasty implant may be used in either the fourth and/or fifth metatarsal.



FIGURE 4

STEP 4 | Once exposure is achieved and utilizing fluoroscopic confirmation, the small starter burr is used to create a center hole in the opposing articular surfaces of each lateral TMT joint | FIGURE 4.



STARTER BURR



FIGURE 5

STEP 5 | While preserving a cortical rim, semispherical recesses are created using the implant sized oscillating burrs | FIGURE 5.

NOTE | The TAVA hand power loaner system for the oscillating burrs may be ordered from Wright. The kit number is TAVA KIT1.



FINISHING BURR

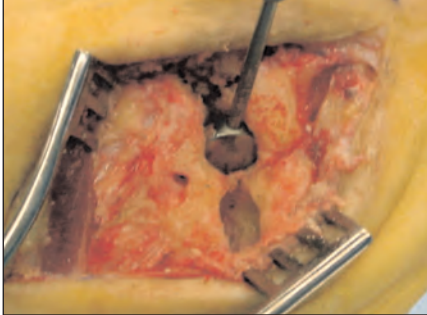


FIGURE 6

STEP 6 | The trial sizing tools are inserted to ensure the sphere size is adequate (typically size 11) and will provide mild joint distraction and free motion | **FIGURE 6**.



SIZER

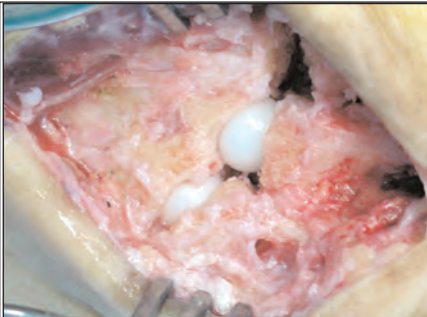


FIGURE 7A

STEP 7 | Once the size is determined, the ORTHOSPHERE® Interpositional Arthroplasty implant is inserted with planar flexion applied to the metatarsal | **FIGURE 7**. Stability is verified through the ranges of motion. Overlying soft tissues are approximated and a splint is applied.

postoperative COURSE

The period of immobilization and protected weightbearing after interpositional arthroplasty is dictated by concomitant procedures (i.e. medial column arthrodesis). In the event that an isolated lateral column arthroplasty is performed, the patient is immobilized and instructed non-weightbearing for two weeks. They then progress to full weightbearing in a removable walker boot. An accommodative shoe with an arch support device is then utilized at six weeks.



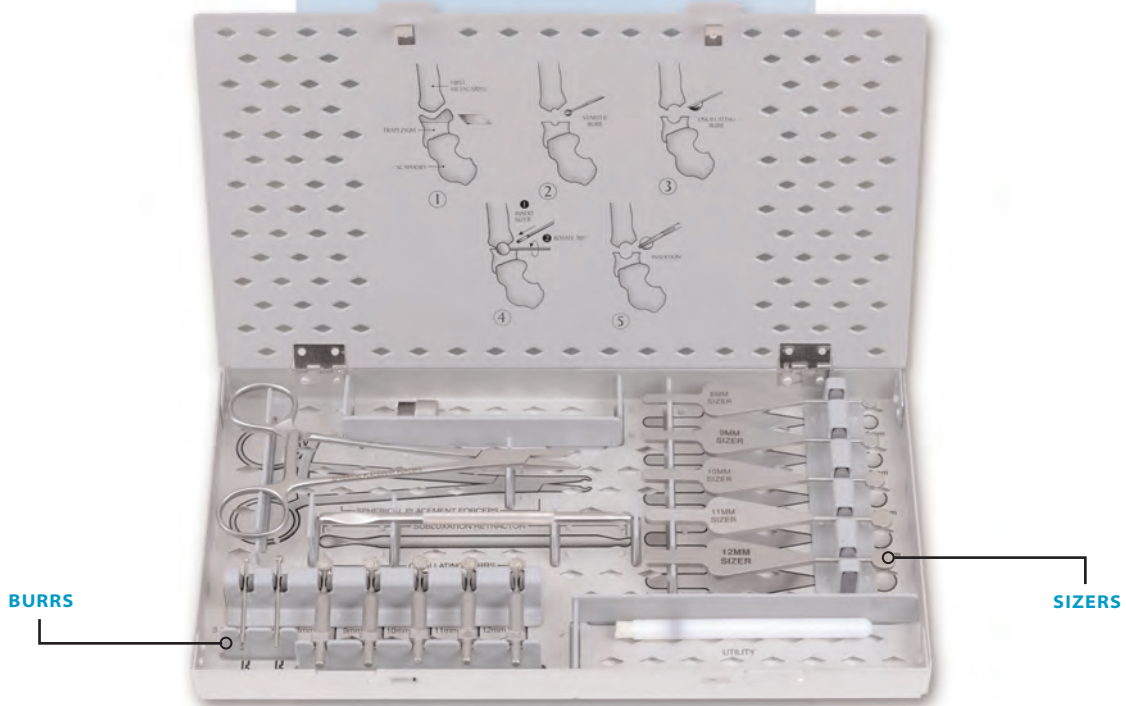
FIGURE 8A



FIGURE 8B

Postoperative x-rays show placement of implants | FIGURE 8A, 8B.

INSTRUMENT SET



The ORTHOSPHERE® Instrument Set includes 6 oscillating burrs, 6 implant sizers, 2 rotary starter burrs, insertion forceps, burr cleaning brush, and power adapters. The implant sizes are as follows:

| CATALOG# | SPHERE SIZE |
|----------|-------------|
| 853-0009 | 9mm |
| 853-0010 | 10mm |
| 853-0011 | 11mm |
| 853-0012 | 12mm |
| 853-0013 | 13mm |
| 853-0014 | 14mm |



Wright Medical Technology, Inc.
 5677 Airline Road
 Arlington, TN 38002
 901.867.9971 phone
 800.238.7188 toll-free
 www.wmt.com

Wright Medical Europe SA
 Commerce Parc
 Gebouw B, 6th Floor Krijgsman II
 1186 DM Amsterdam
 The Netherlands
 Tel +31(0) 205450100