Implantable K-wire

SURGICAL TECHNIQUE

WRIGHT
FOCUSED EXCELLENCE
Wright recognizes that proper surgical procedures and techniques are the responsibility of the medical professional. The following guidelines are furnished for information purposes only. Each surgeon must evaluate the appropriateness of the procedures based on his or her personal medical training, experience, and patient condition. Prior to use of the system, the surgeon should refer to the product Instructions For Use package insert (150859) for additional warnings, precautions, indications, contraindications and adverse effects. Instructions For Use package inserts are also available by contacting the manufacturer. Contact information can be found on the back of this surgical technique and the Instructions For Use package inserts are available on wmt.com under the link for Prescribing Information.

Please contact your local Wright representative for product availability.
Product Information

Device Description

Wright Implantable K-wires are made of implant grade 316 stainless steel. Two diameters are offered in 150mm length which accommodate a variety of anatomies and selected procedures.

Indications

Wright Implantable K-wires are indicated for use in fixation of bone fractures, for bone reconstructions, and as guide pins for insertion of other implants. Additionally, Wright Implantable K-wires are indicated for the fixation of osteotomies and reconstruction of the lesser toes following correction procedures for hammertoe, claw toe, mallet toe, and metatarsophalangeal (MTP) joint instability.

Contraindications

- Active or suspected infection or in patients who are immune compromised
- Patients previously sensitized to stainless steel
- Patients with certain metabolic diseases
- Patients exhibiting disorders which would cause the patient to ignore the limitations of internal fixation

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Hammertoe Correction

The technique for hammertoe correction utilizing the Implantable K-wire can include an open surgical procedure, percutaneous soft tissue releases, or closed osteoclasis procedure. In the open technique, first the proximal interphalangeal (PIP) joint is exposed. The head of the proximal phalanx and the base of the middle phalanx are resected if arthrodesis is desired, or just resection of the condyles of the proximal phalanx if arthroplasty is the goal.

The Implantable K-wire is driven antegrade from the PIP joint out the distal end of the toe.

The toe is correctly positioned and the wire is drilled retrograde into the proximal phalanx. **FIGURE 1**

**CAUTION: If only correcting a hammertoe deformity, the MTP joint should not be crossed.**

The techniques following claw toe and mallet toe corrections are similar.

If any of the mentioned corrections are done in conjunction with MTP joint instability correction, the Implantable K-wire can be driven antegrade from the opened interphalangeal joint out the distal end of the toe. The toe is positioned correctly and the wire is driven retrograde into the metatarsal head.

**NOTE: The procedure for soft tissue exposure and repair is under the discretion of the surgeon.**
MTP Joint Instability Correction

The open surgical procedure technique for achieving MTP joint instability correction includes various soft tissue balancing procedures and repairs and sometimes in combination with bony procedures as well. The implantable K-wire is used for stabilization of the corrected MTP deformity and typically left intact for approximately 6 weeks. The Implantable K-wire is typically driven antegrade from the MTP joint out the distal end of the toe. The toe is aligned and the wire is drilled retrograde into the metatarsal. Alternatively, the K-wire may be driven entirely in a retrograde manner from the tip of the toe. **FIGURE 2**

*NOTE: The technique for achieving fixation after MTP joint instability correction may also be percutaneous. This includes drilling the Implantable K-wire retrograde through the distal end of the toe into the metatarsal. This procedure could be performed using either a single or double trocar K-wire.*

Postoperative Protocol

When used for fixation after one of the procedures discussed above, the K-wire is typically removed in a 4-6 week post-operative window. The amount of time for post-operative weight bearing may be driven by the need to protect other procedures performed in conjunction with the digital deformity correction (i.e. Lapidus arthrodesis). Typically, for toe deformities stabilized with implantable K-wire fixation, the patient is allowed to weight bear immediately after surgery in a rigid post-operative shoe or fracture boot walker. This manner of protected weight bearing is continued until the K-wire is removed. Normal retail shoes and sandals are not allowed until adequate healing has occurred and the K-wire is removed. There is worry of K-wire breaking particularly if the K-wire is crossing the MTP joint and the patient is walking outside of the rigid post-operative surgical shoe or fracture boot walker. Restrictions for daily tasks such as bathing, driving, or working are physician specific and usually default to the other procedures performed in conjunction with digital deformity correction. The return to work decision is highly individualized to the physician comfort level, work to be performed and job site restrictions.

Postoperative care is the responsibility of the medical professional.

Explant Information

When the Implantable K-wire is used for fixation after correction of one of the digital deformities mentioned above, it is typically removed 4 to 6 weeks post-operative. If early removal of the implant is required due to revision or failure of the device, the surgeon should contact the manufacturer using the contact information located on the back cover of this surgical technique to receive instructions for returning the explanted device to the manufacturer for investigation.
Ordering Information

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<th>Part Number</th>
<th>Description</th>
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