



SMART Toe™ Intramedullary Memory Implant

SMART TOE™
IMPLANT



Frozen
implant
becomes
longer,
narrower



Channels
drilled



Overview

This fusion device is designed to correct misalignments of the toe bones. It can be used for a range of deformities, including hammertoe, claw toe, mallet toe, arthritis and dislocations. The implant is contained completely within the bones of the toe, leaving no pins or screws sticking out.

Preparation

After anesthesia is administered, the patient is positioned and the foot is cleansed and sterilized. The surgeon makes an incision to access the bones of the problem toe.

Creating the Channels

The surgeon separates the bones at the target joint and drills channels into the center of the two phalanges that will be fused. This channel provides space for the implant to be inserted.

Inserting the Implant

The SMART Toe implant is made from a memory metal that reacts to heat and cold. Prior to implantation, the implant is kept frozen. This keeps it contracted in a long, narrow shape. In this contracted state, the surgeon slips the implant into the hollowed ends of the bones.

Fixation

Within about a minute, the heat of the body warms the implant and activates the memory metal. The width of the implant expands, locking it in place against the inner walls of the channels. The implant contracts along its length, pulling the ends of the bones securely together to allow the bones to fuse.

End of Procedure and Aftercare

The incision is closed, and the foot is bandaged. The patient will be able to put weight on the foot later the same day. The bones will fuse during the next several weeks.

Implant
warms,
draws bones
together

