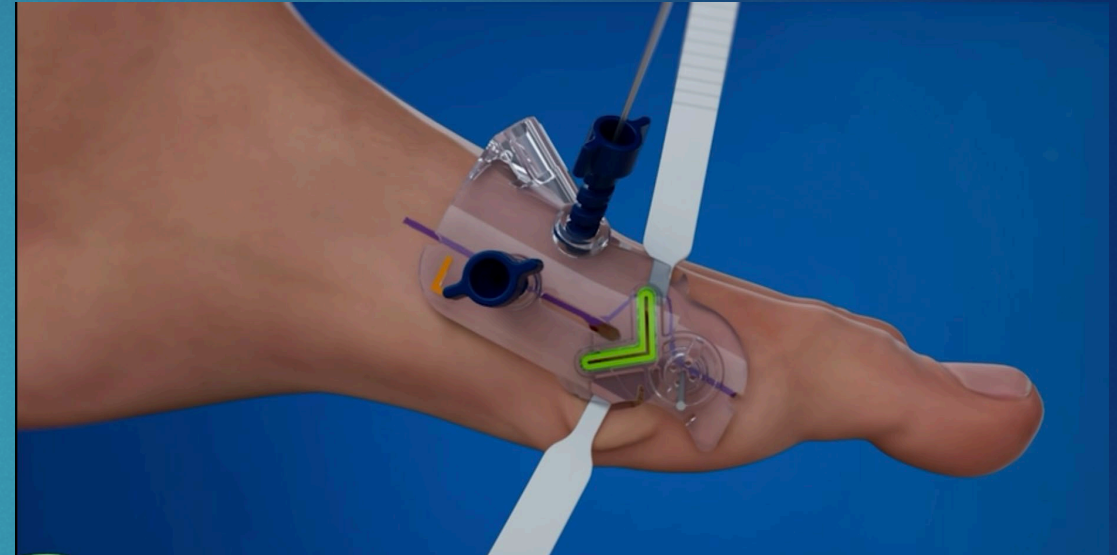




MIS CHEVRON BUNION SYSTEM

# MIS Chevron Bunion System

- Based off a traditional method
- Chevron Osteotomy Guide
- Sagittal Saw
- Screw guide for placement of a 3.5mm cannulated screw
- 1cm incision
- Indications
  - Mild to moderate bunion
- Correction in transverse and sagittal plane
- Cost effective

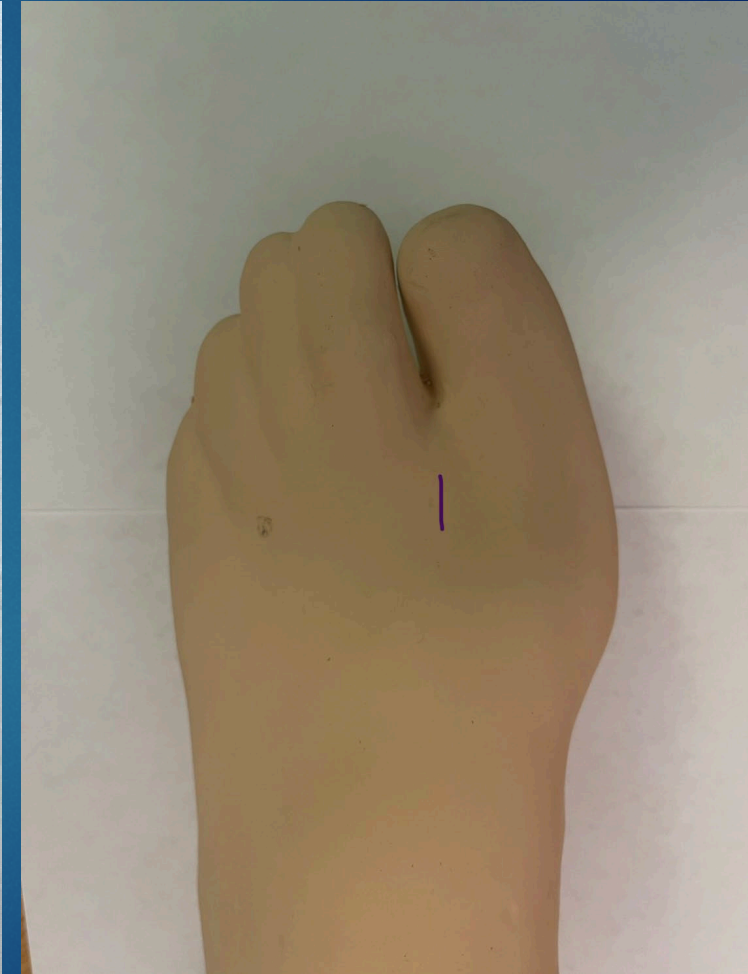
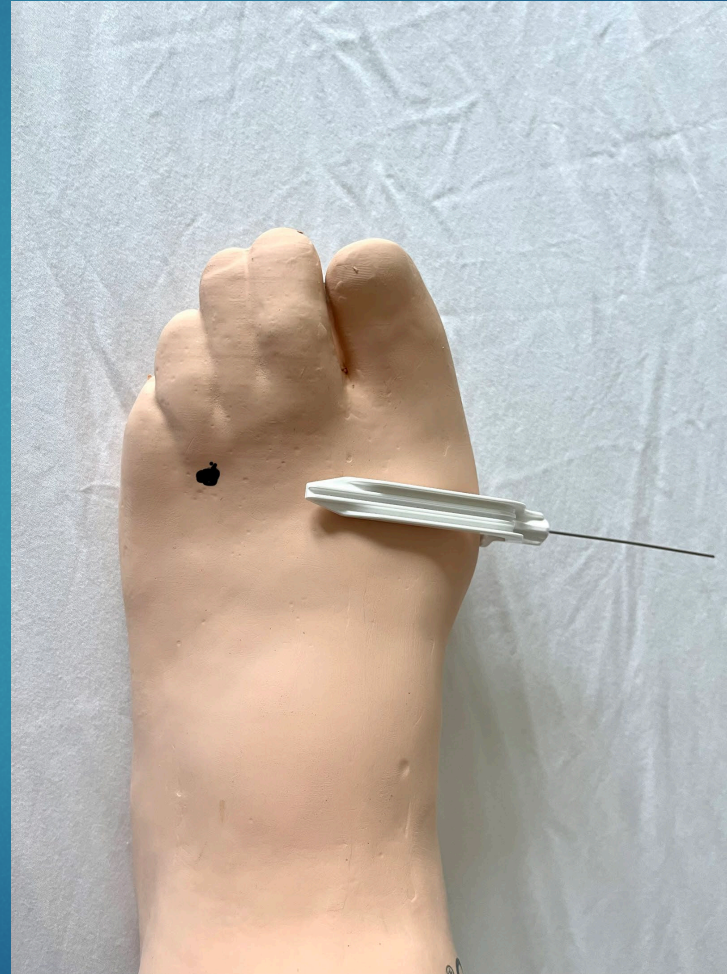


Prepare the Site

# MIS Lateral Release: Mark 4<sup>th</sup> MPJ

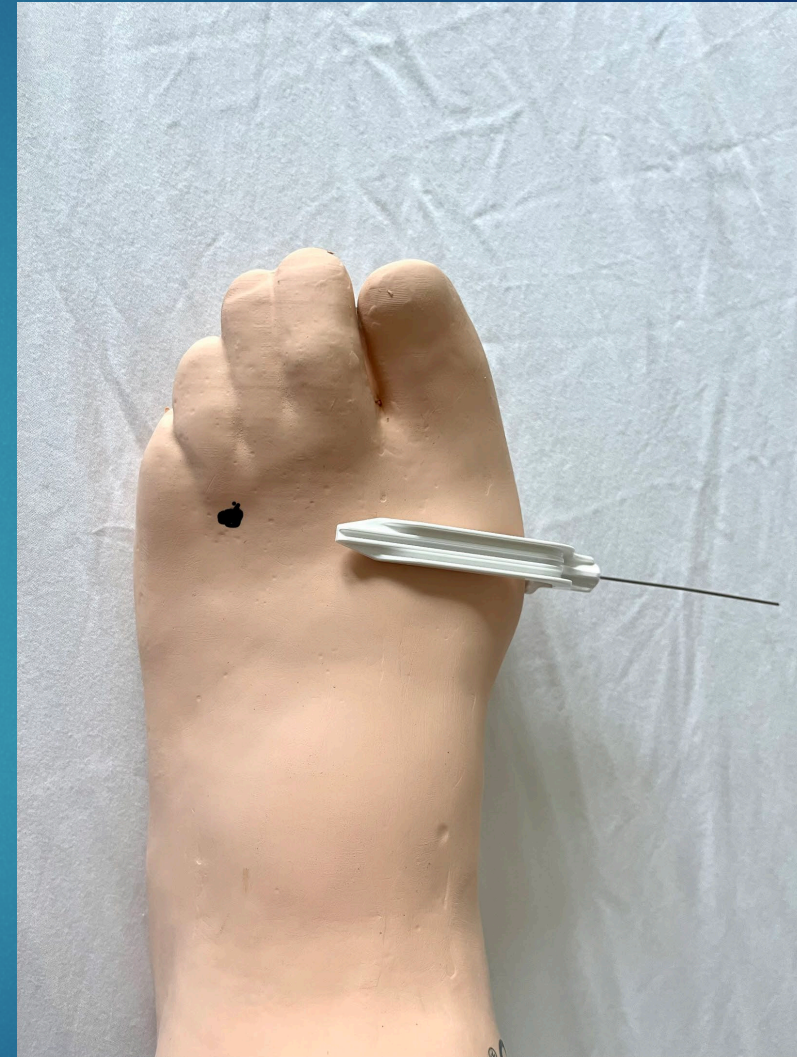
(Optional) Perform lateral release,  
at surgeon's discretion.

Place a small mark on the skin on  
the dorsal aspect of the Fourth  
Metatarsophalangeal Joint (MPJ).



## Align the Targeting Guide

Place the white Targeting Guide on the foot. Aim this directly across the top of the foot towards the 4<sup>th</sup> MPJ.



## Align the Targeting Guide

Insert a K wire from the kit into the targeting guide but not into the skin.

Utilize live fluoroscopy to position the k wire. Shoot directly down the k wire so it looks like a BB. The wire position should be 1mm superior to midline of head AND Neck of the 1<sup>st</sup> metatarsal. (as shown)

Advance the K wire into the 1<sup>st</sup> metatarsal and through the far cortex.



## Align the Precision Osteotomy Guide

Place the Osteotomy guide on K wire #1 in the center adjustment hole.

Confirm with fluoroscopy that the chevron insert is midline of the 1<sup>st</sup> metatarsal and in the neck of the 1<sup>st</sup> metatarsal (as shown on the right) Shoot directly down K wire #1.

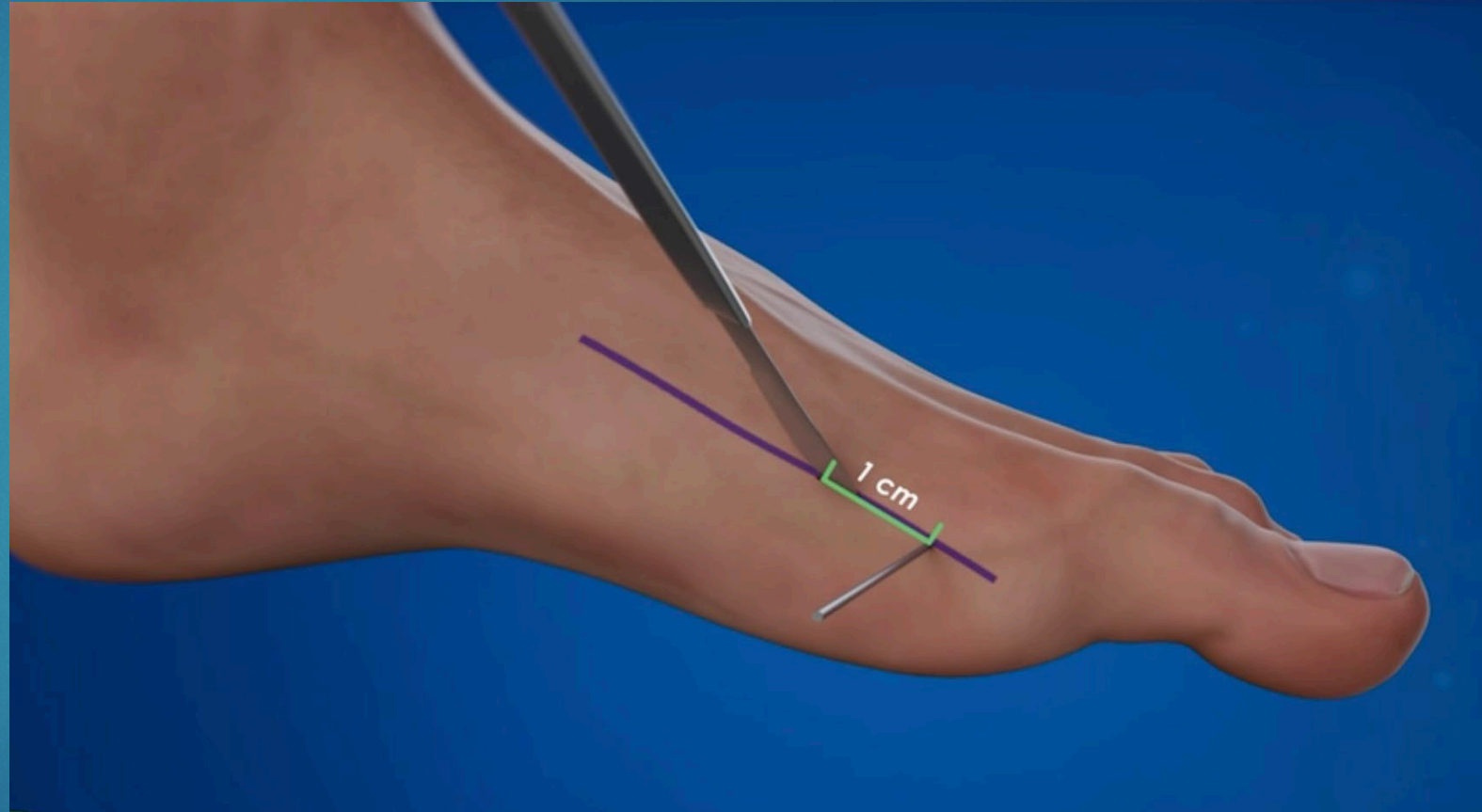


## Make the Skin Incision

Remove the Chevron  
Osteotomy Guide

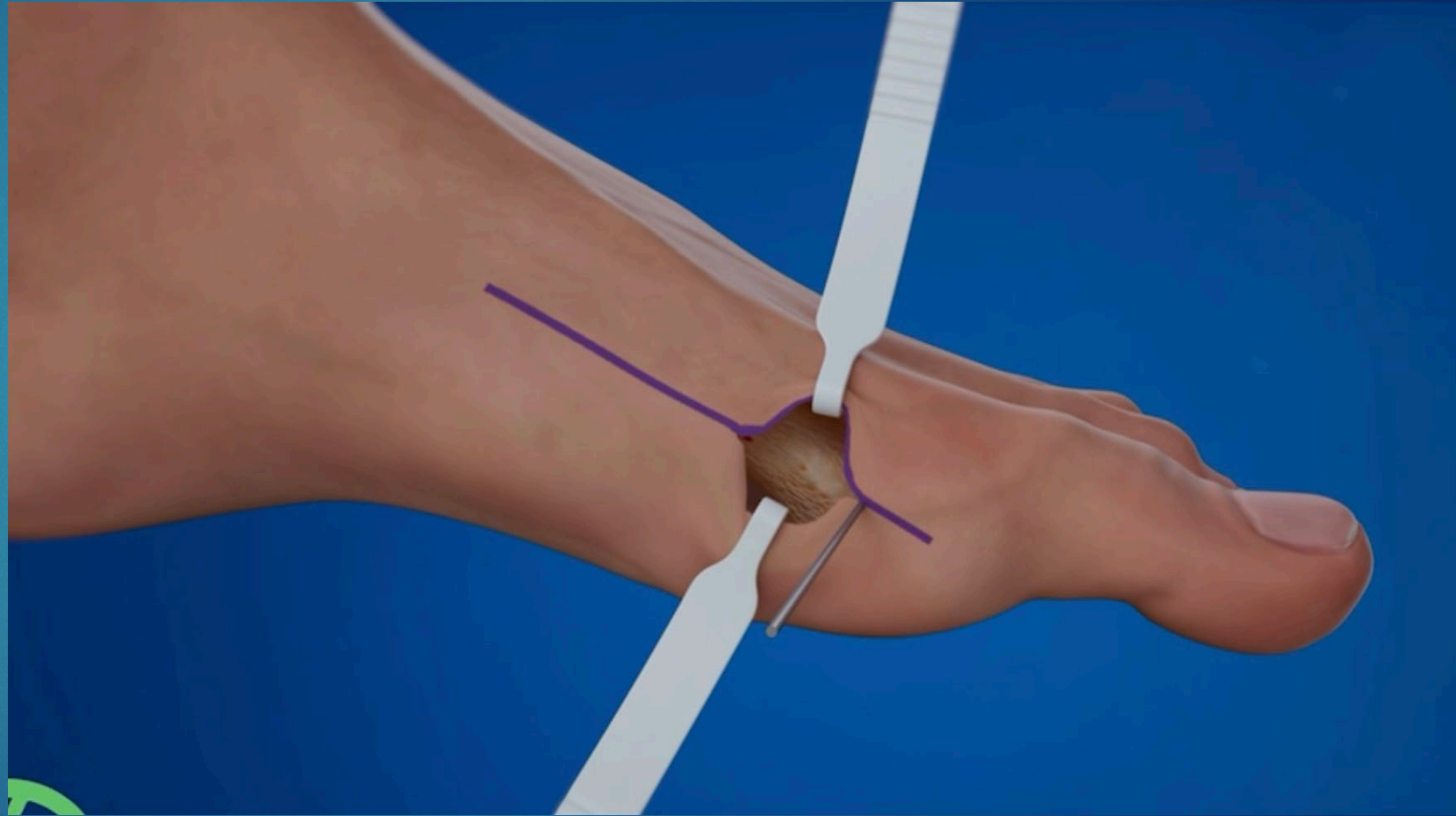
Make a 1 cm incision from K wire  
#1 proximally along the skin  
marking line.

Perform dissection



## Make the Skin Incision

Insert the Dorsal Retractor (longer) and the plantar retractor.

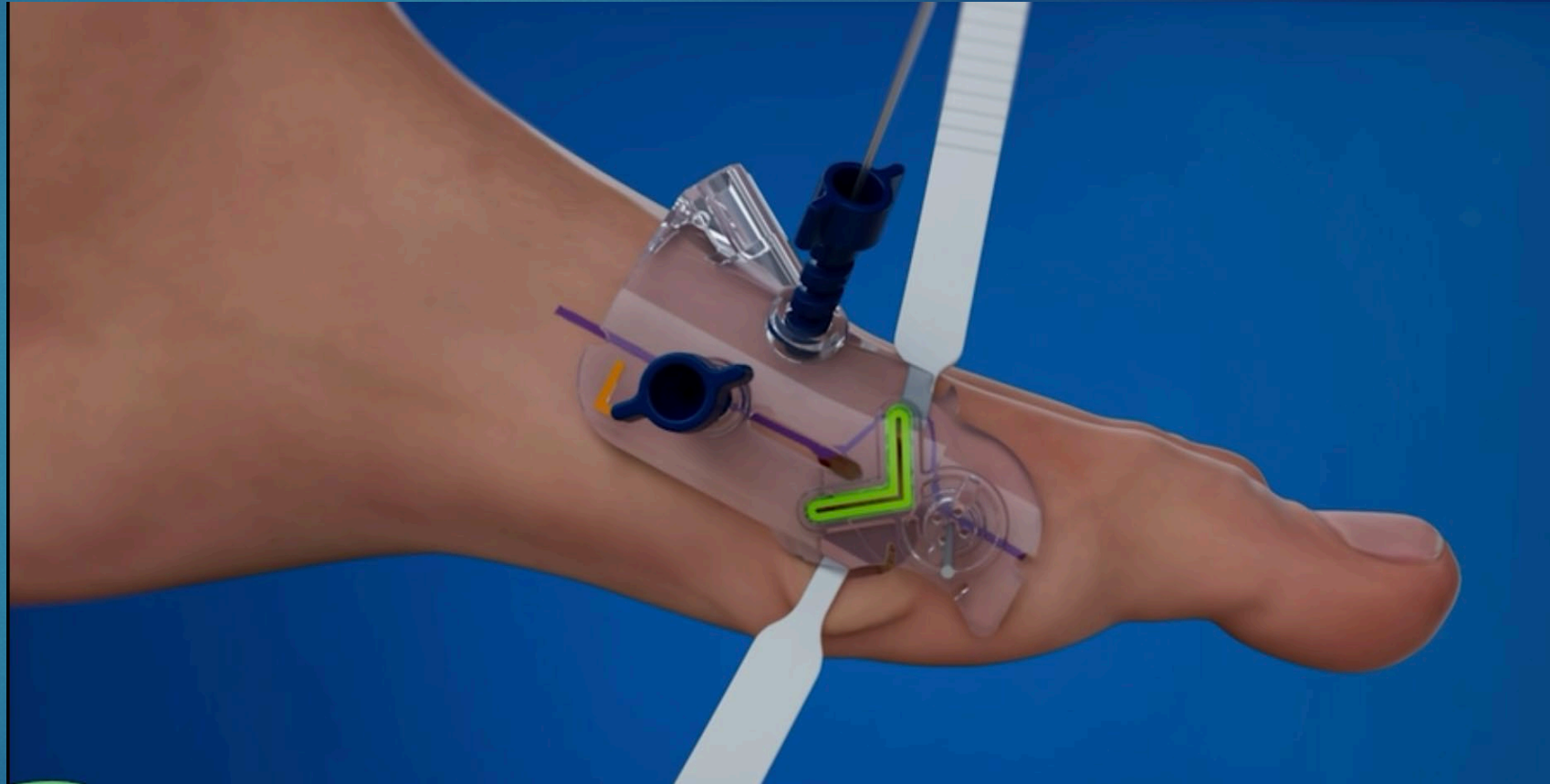


## Align the Precision Osteotomy Guide

Place Osteotomy guide back into position on K wire #1 in the same adjustment hole as previously chosen.

Osteotomy guide positioned in line with midline of the 1<sup>st</sup> metatarsal.

Insert K Wires #2 and #3 into the blue alignment screws.



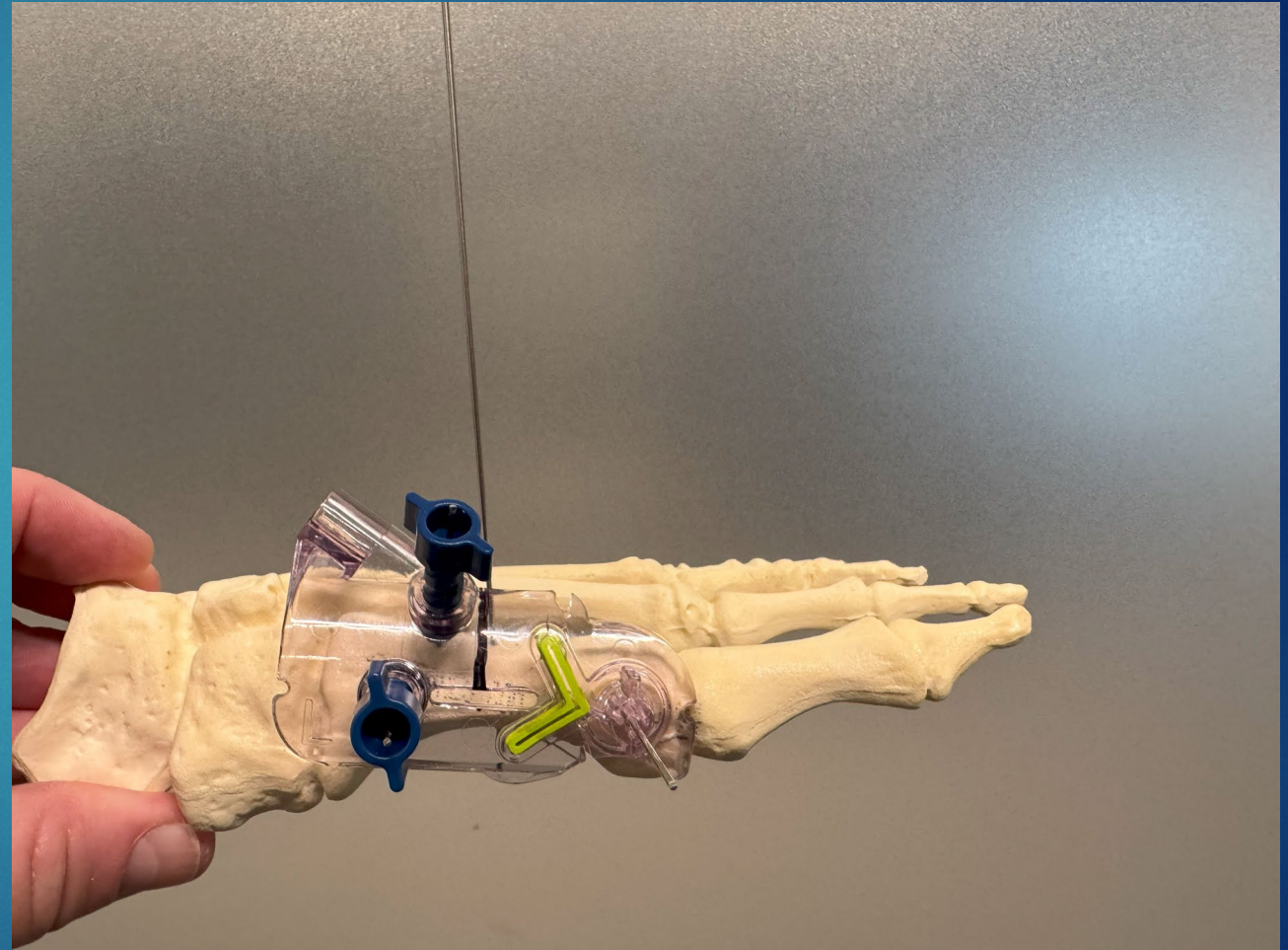
## Insert Guide Wire

Dorsally mark the skin at the midline of the center opening (indicated by the black line).

Make a small dorsal incision

Insert the guidewire Bicortical in the midline on the dorsal aspect of the first metatarsal.

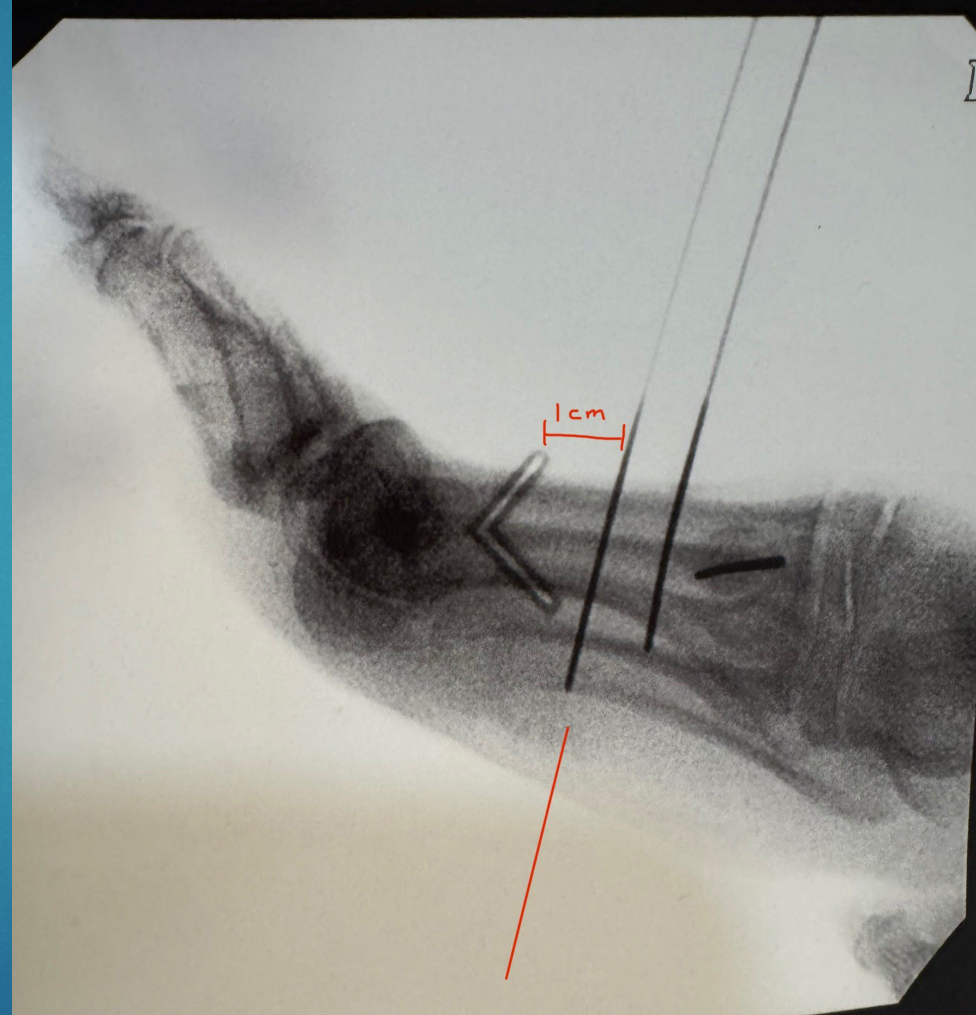
This will be the introduction site of the dorsal screw placement



## Insert Guide Wire

Confirm correct position with lateral fluoroscopy imaging.

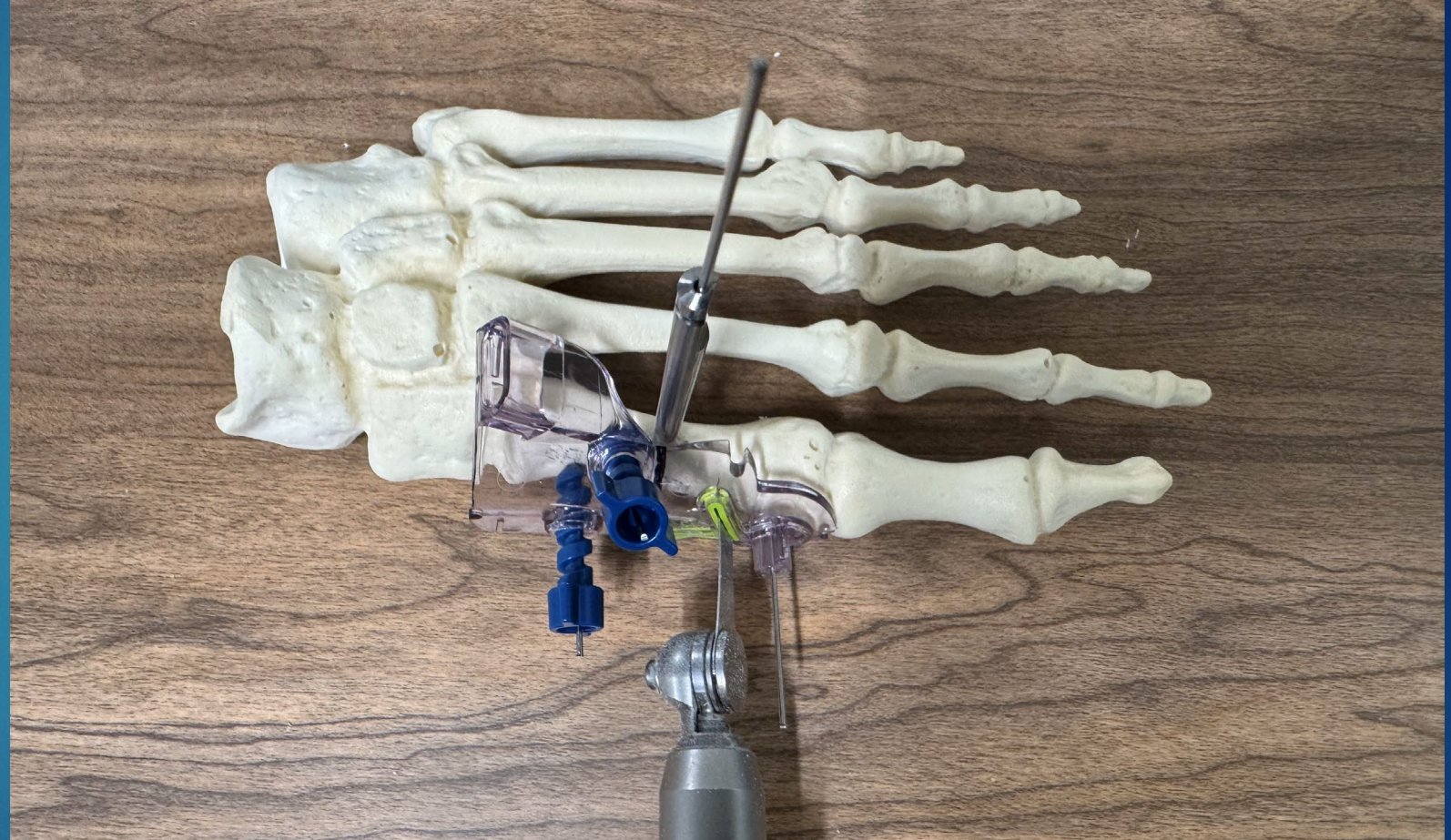
-Guide wire should be approx. 1cm proximal to the dorsal osteotomy



## Create the Osteotomy

Retract skin and perform osteotomy.

Use Stryker or Hall compatible saw blade (9 x 31 x .38)



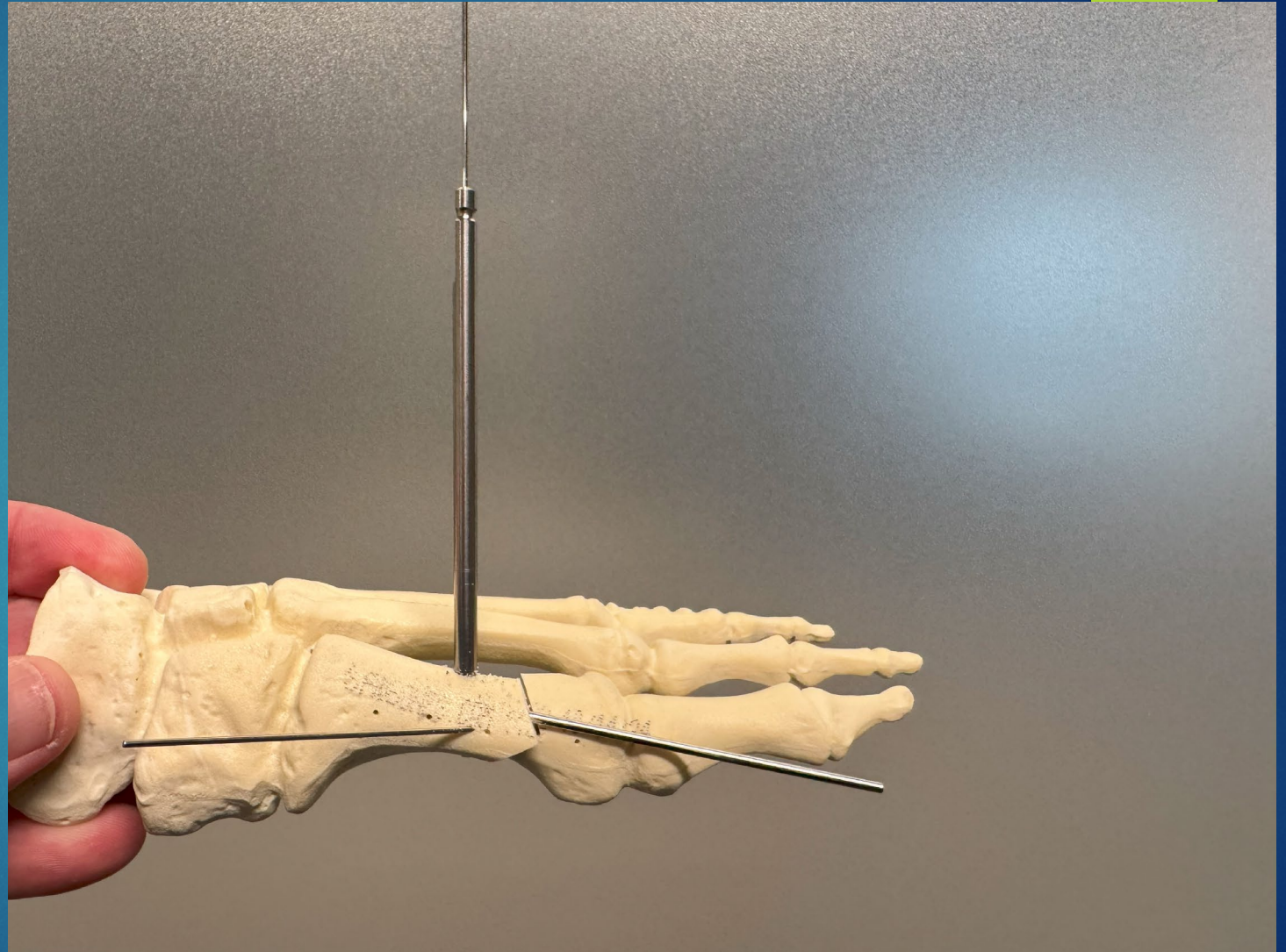
## Shift Metatarsal Head

Remove K wire #1, #2, and #3.

Move the 1<sup>st</sup> metatarsal head laterally and insert a 2.0 Steinmann pin down the canal of the 1<sup>st</sup> metatarsal to hold correction.

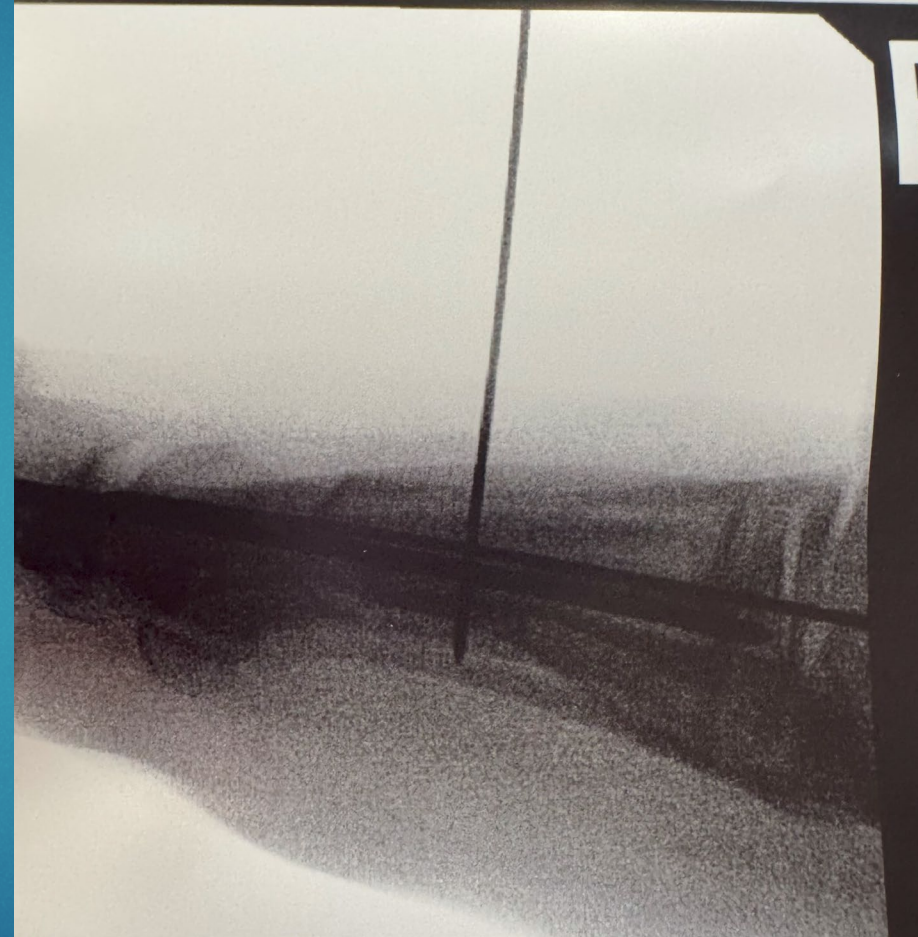
Insert temporary fixation medially if desired.

Insert the cannulated Drill/Countersink over the guide wire. Retract the EHL and perform a cortical punch.



## Shift Metatarsal Head

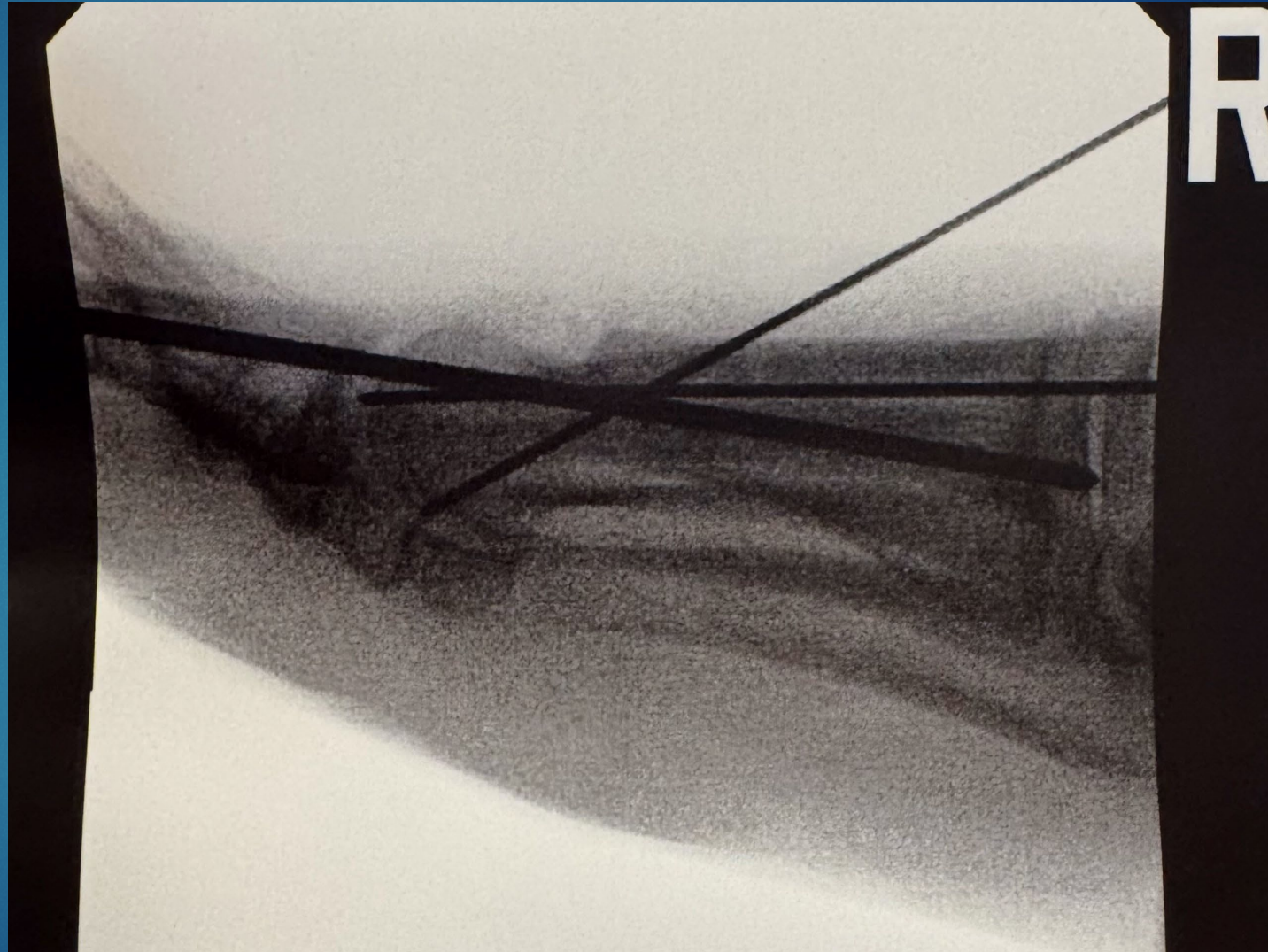
Confirm Position with Flouroscopy



## Reposition Guide Wire

Next partially remove and reposition guide wire (as shown). Stop short of entering the 1<sup>st</sup> MPJ.

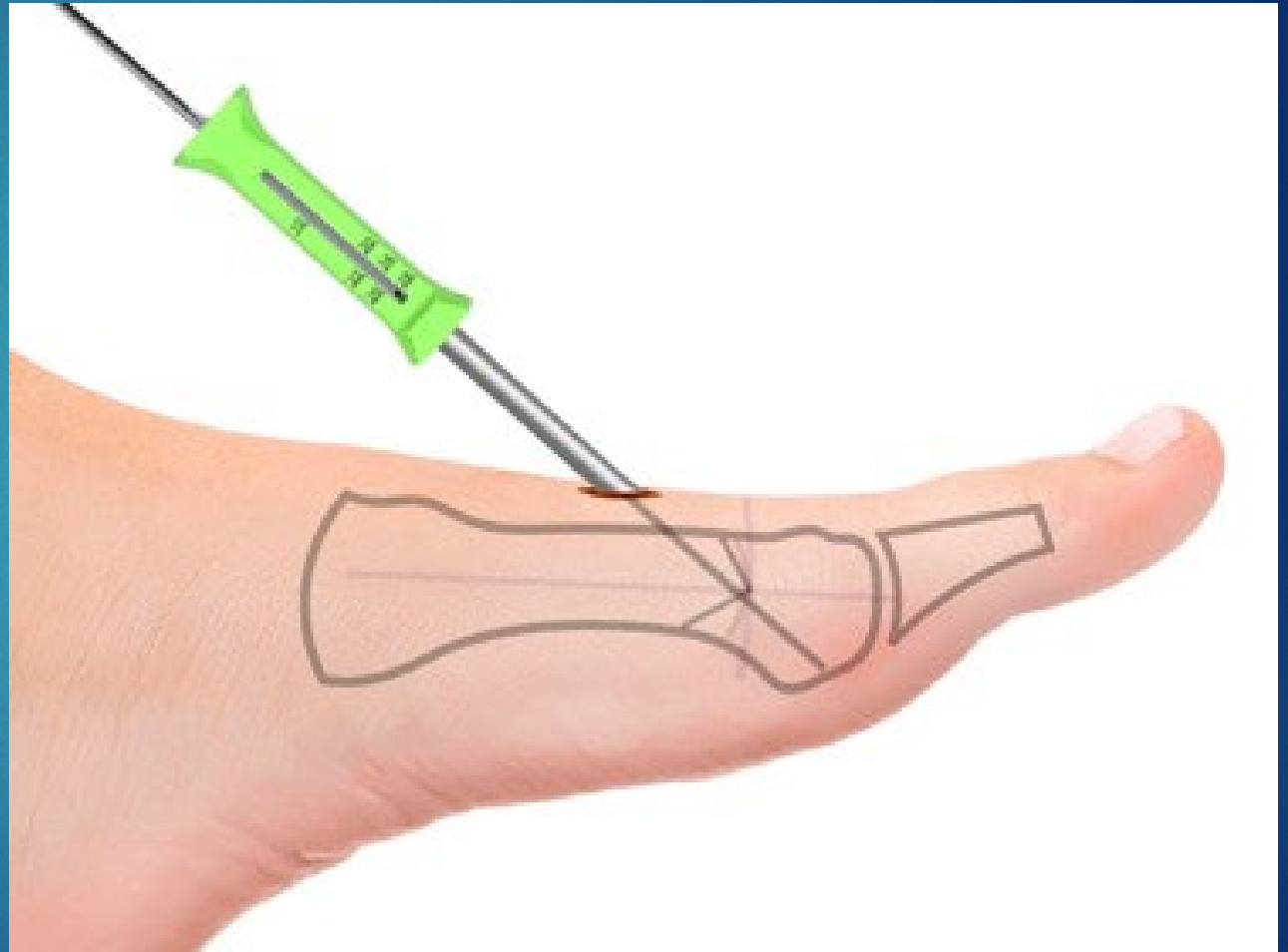
Again drill / countersink to the positive stop.



## Insert Screw Guide and Measure for Length

Utilize the screw guide and measure the screw length utilizing the laser line on the guide wire.

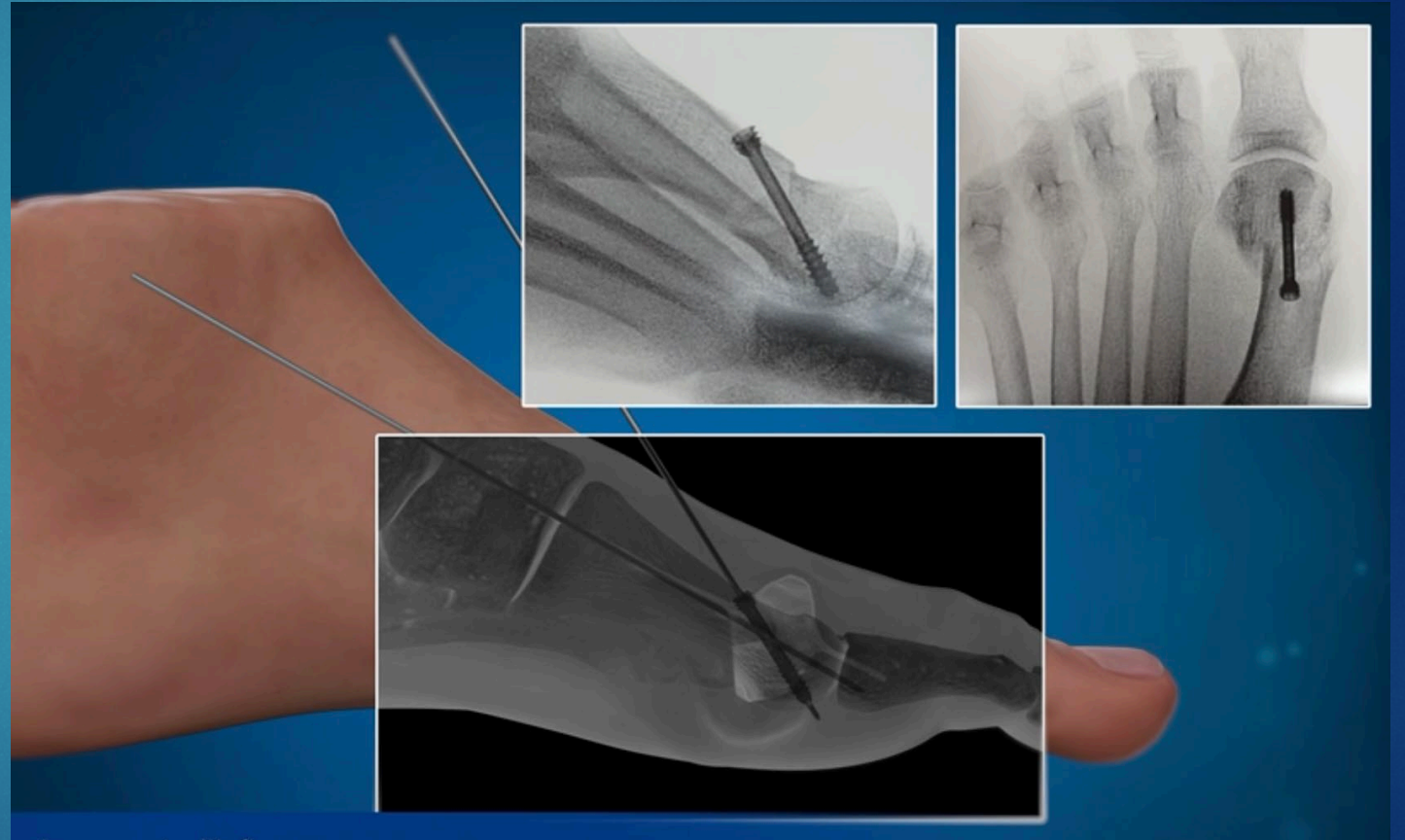
Select the proper screw length  
-24mm or 27mm



## Insert Implant

Insert the 3.5 mm headless compression screw

Confirm the screw position with fluoroscopy, AP and Lateral.



## Close incision

Resect and smooth the medial bone shelf with power bone rasp / saw.

Remove the Guide Wire and temporary fixation.

Flush and close incisions.



Post op



Post op



Pre op

Post op



Pre op



Post op



Two Screw Option Shown

# MIS Precision Chevron Bunion System™ Components

Left precision osteotomy guide (embossed "L")

Right precision osteotomy guide (embossed "R")

Cannulated screwdriver, Torx T10 tip

Blue, 3.5 mm dia., 27 mm length screw

Screw guide with depth gauge

Targeting guide

Drill bit

1.1 mm guidewire with laser etch, 140 mm long

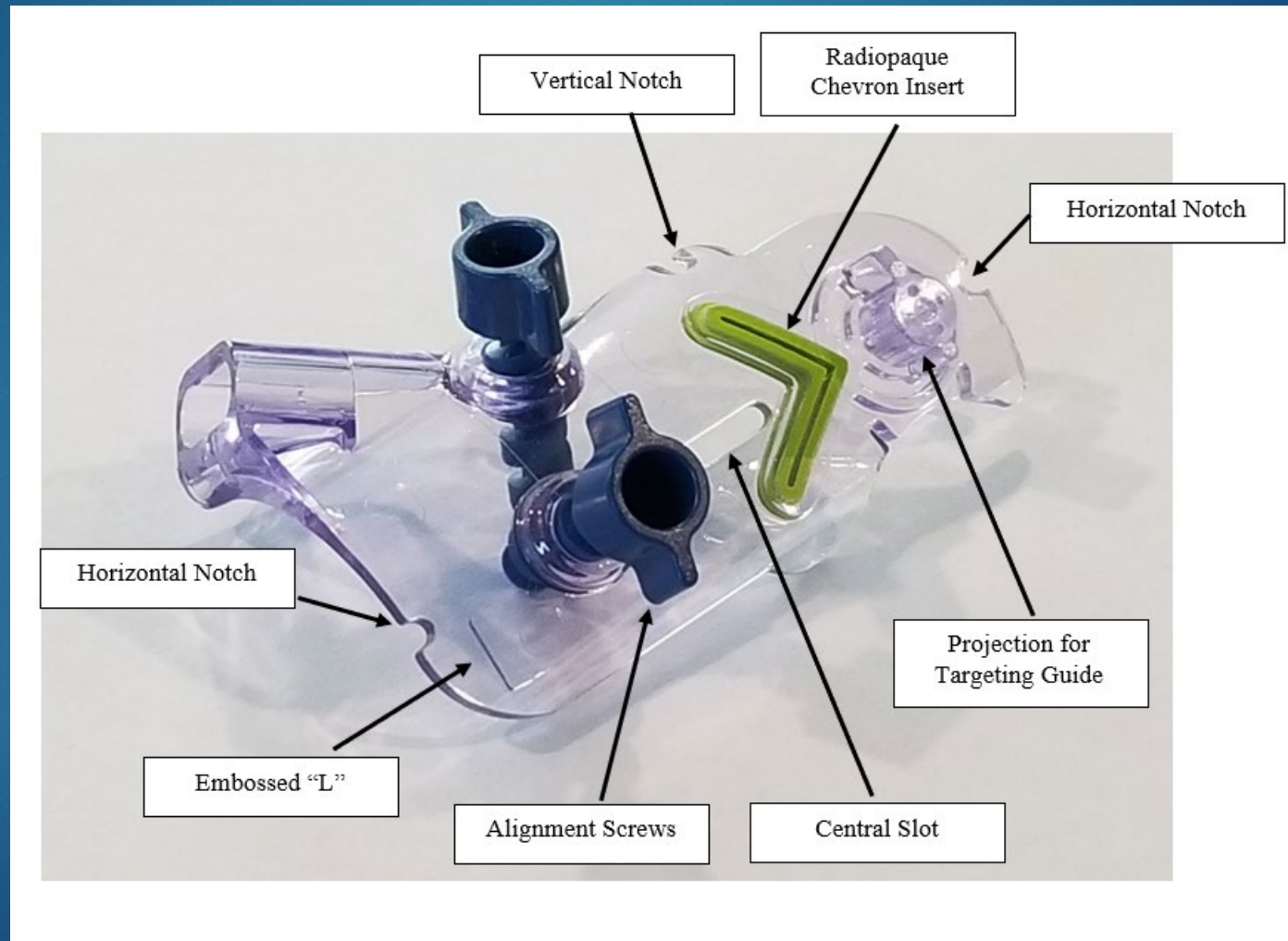
Three 1.1 mm K-wires, 100 mm long

Green, 3.5 mm dia., 24 mm length screw



# MIS Precision Chevron Bunion System™

## The Precision Osteotomy Guide



# Compatible Sawblades are Stryker 2296-003-125 or Conmed 5023-249

