

Case Study

Todd H.



Diagnosis:

- Hallux valgus deformity, left foot
- Deviated left 5th metatarsal
- Left 2nd hammertoe deformity
- Left 3rd hammertoe deformity
- Left 4th hammertoe deformity
- Left 5th hammertoe deformity

Procedure(s):

EOTTS (Flat Feet)

Bunion Correction Surgery

5th Metatarsal Osteotomy

Hammertoe Correction (2nd, 3rd, 4th and 5th)

Technique:

Hallux Valgus Deformity, Left Foot

A small linear incision was made at the inner side of the left foot. This was done utilizing a medical imaging technique (fluoroscopy) to assure proper position of the incision and proper position of the osteotomy, or

correction. Under fluoroscopic guidance, a through-and-through osteotomy was created within the distal portion of the 1st metatarsal, or the long bone leading to the big toe. Attention was then directed to the medial aspect of the left hallux (big toe) where another small incision was made and an osteotomy was created within the proximal phalanx of the hallux, or the first bone of the big toe. Utilizing fluoroscopy, a canal guide was placed in the original incision into the osteotomy at the 1st metatarsal. This was used to shift the head of the 1st metatarsal laterally into its corrected position. A pin was inserted through a small incision at the base of the distal phalanx of the left hallux. The hallux was shifted medially (centered) into its corrected position at the osteotomy site. The pin was inserted more proximally along the medial aspect of the metatarsal head and into the 1st metatarsal shaft.

Deviated Left 5th Metatarsal

Attention was then directed to the dorsal aspect of the left 5th metatarsal shaft and neck region. An oblique osteotomy from dorsal distal to proximal plantar was created within the 5th metatarsal shaft. The 5th metatarsal was then able to be shifted medially into its corrected position.

Left 2nd Hammertoe Deformity

Attention was then directed to the dorsal aspect on the left 2nd metatarsophalangeal joint (top joint connecting second toe's long bone to its first bone) where the toe was severely dorsally and medially contracted. Blunt dissection was performed until the joint could be identified and a dorsal capsulotomy was performed. This allows the toe to be plantar flex into its corrected position at the metatarsophalangeal joint. Attention was then directed to the plantar aspect of the left 2nd toe. An incision was made through the bone to the base of the proximal phalanx (first bone) of the 2nd digit. The toe was then able to be manipulated plantarly and laterally into its corrected position.

Left 3rd Hammertoe Deformity

A small incision was made at the dorsal aspect of the left 3rd metatarsophalangeal joint. Attention was directed to the plantar aspect of the left 3rd toe where a small incision was made at the plantar aspect of the 3rd digit proximal interphalangeal joint. A small incision was made at the base of the proximal phalanx (first bone) of the 3rd digit. Under fluoroscopic guidance, an osteotomy was created within the base of the proximal phalanx of the 3rd digit. Once this was completed, the toe was able to be moved plantarly and laterally into its corrected position.

Left 4th Hammertoe Deformity

A small incision was made at the dorsal aspect of the left 4th metatarsophalangeal joint. Attention was directed to the plantar aspect of the left 4th toe where an incision was made at the plantar aspect of the 4th toe proximal interphalangeal joint. A small incision was made at this site and the flexor tendon was transected. A small incision was made at the base of the proximal phalanx (first bone) of the 4th toe. Under fluoroscopic guidance, an osteotomy was started within the base of the proximal phalanx of the 4th toe. Once this was completed, the toe was able to be moved plantarly and laterally into its corrected position.

Left 5th Hammertoe Deformity

A small incision was made at the dorsal aspect of the left 5th metatarsophalangeal joint. Attention was directed to the plantar aspect of the left 5th toe where a small incision was made at the plantar aspect of the 5th toe proximal interphalangeal joint. A small incision was made at this site and the flexor tendon was transected or cut. A small incision was made at the base of the proximal phalanx of the 5th toe. An osteotomy was created at the base of the proximal phalanx (first bone) of the 5th toe. Once this was completed, the toe was able to be moved plantarly and laterally into its corrected position.