
First MTPJ Implant Arthroplasty

Involving Chronic Gouty Arthritis



Reference Toe Implant™

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Hallux Valgus Correction

A case study featuring total Implant Arthroplasty of the Great Toe Joint



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INTRODUCTION: Hallux valgus deformity presents as a progressive deformity which is surgically treated with a variety of approaches. Osteotomies, arthrodesis, and total joint implant arthroplasty are among the more common surgical options. The deformity is characterized by an increase in the 1st intermetatarsal angle, increase in the sesamoid position, and varying degrees of great toe joint osseous adaptation and degenerative changes. The geriatric population presenting with symptomatic hallux valgus tend to have more degenerative changes along with a more sedentary lifestyle and increased risk for falls and comorbidities. This case presentation involves a 57 year old female with a moderate hallux valgus deformity and degenerative changes of the great toe joint with decreased range of motion. **(Figure 1)** The patient previously had a distal 1st metatarsal osteotomy for hallux valgus

correction. The hallux valgus has recurred and the joint is painful.

TOTAL IMPLANT ARTHROPLASTY: The surgical treatment involved a total silicone implant arthroplasty of the great toe joint with lateral release of the collateral ligament and adductor tendon along with a medial capsulorrhaphy. The Reference Toe is

devastating complication when the geriatric patient falls during a non-weight bearing recovery. Patients who have good bone quality and proprioception are kept non weight bearing for two weeks.

CONCLUSION: Surgical correction of the degenerative hallux valgus (and hallux rigidus) deformities are classically arthrodesis, and osteotomy procedures. In the geriatric population, comorbidities make non weight bearing recovery risky. The silicone total implant arthroplasty with the Reference Toe System provides an excellent alternative that will facilitate immediate weight bearing in a walking boot, which lowers the risk of falls and simplifies the post op course for the patient. **(Figure 3)** shows the case study at post op week 8. The patient has been weight bearing during the entire recovery with no change in alignment or stability.

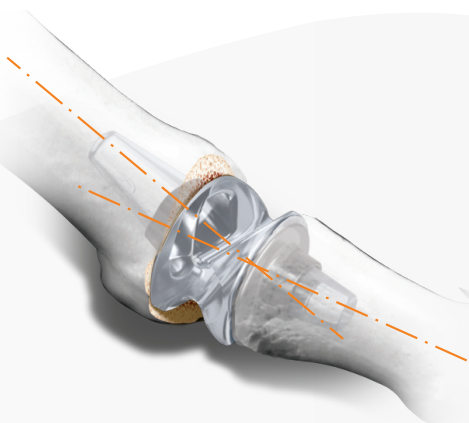


FIGURE 2

FIGURE 1



a new silicone total implant arthroplasty system with disposable instrumentation and redesigned grommets and hinge contour of the implant. The innovative stem of the implant and the grommet design eliminate the need for broaching.

The hinge is anatomically designed to match the 16 degree declination of the 1st metatarsal. **(Figure 2)**. The purpose of this case presentation is to demonstrate the Reference Toe System (RTS) as a viable surgical alternative with simple post op recovery compared to other arthrodesis and osteotomy procedures. Geriatric patients who are at risk for falls and fractures during a non-weight bearing recovery are allowed to ambulate in a walking boot immediately. A hip fracture can be a

FIGURE 3

