INTRODUCTION

Great toe joint replacement surgery is an elective outpatient procedure indicated for end-stage first metatarsal phalangeal joint pain. Hallux limitus or hallux rigidus are conditions characterized by an inability to bend the great toe joint (propulsive phase of gait) without chronic pain and inflammation. Great (big) toe joint replacement can offer dramatic improvement for individuals suffering from painful arthritis and lack of mobility as a result of a number of medical and orthopedic conditions. These conditions are caused by a long list of entities that predisposes or causes damage to the first metatarsal phalangeal joint cartilage and surrounding bone and joint capsule.

Most articles written about hallux limitus and rigidus implicate a congenitally long or short first metatarsal bone as well as a severely elevated first metatarsal, a condition called elevatus of the first ray. Of course, some of the more common conditions which cause this are untreated pronation causing hypermobility of the first ray and jamming of the first metatarsal phalangeal joint cartilage and untreated bunions, and of course trauma to the first metatarsal phalangeal joint. By replacing affected bone and cartilage with an artificial joint, surgeons can reduce foot pain and discomfort and enable patients to resume regular activities. In many cases, the new generation of prosthetics outlasts natural bone and on average lasts for 10 years or more.

CAUSES OF TOE JOINT PROBLEMS

Problems related to the big toe joint can result from a number of foot conditions and injuries. Conditions associated with toe joint pain and immobility include arthritis, gout, untreated bunions and various congenital foot disorders. Great toe joint problems can also occur after an injury or trauma to the foot.

One of the most common big toe joint conditions is hallux limitus, which is a loss of motion in the big toe. Crucial to both movement and balance, the great toe should demonstrate a normal range of upward motion of 50 to 90 degrees. Individuals with hallux limitus experience limited mobility in the big toe and pain when walking or performing other activities involving the feet. Over time, hallux limitus can lead to arthritis, when the cartilage covering the bones begins to erode. Patients may also notice worsening pain ranging in intensity from a deep ache to a sharp, shooting sensation.

For many patients, toe joint replacement surgery is the only option to alleviate pain and increase range of motion. Surgery is indicated when pain is chronic in nature and unresponsive to conservative alternatives including motion-control running shoes, great toe joint injection therapy, orthokinetic wedge orthotic devices and physical therapy. When great toe joint motion is minimal and there are severe arthritic changes to the joint, this condition is referred to as hallux rigidus.

GREAT TOE JOINT REPLACEMENT SURGERY

Great toe joint replacement surgery is an elective procedure that offers improved mobility and relief from pain for people with severe big toe joint problems.

“improved mobility and relief from pain”

Typically, the procedure targets the structure at the base of the big toe, known as the first metatarsal phalangeal joint.
LONG-TERM RECOVERY

Great toe joint replacement is generally considered to be a successful means of treating hallux limitus/rigidus and other conditions affecting the big toe. In fact, many surgeons report that the new generation of prosthetic joints offers patients improved mobility and reduced pain for upwards of ten years or more. While most patients feel no difference when walking on the artificial joint compared to their uninjured foot, some individuals may require physical therapy to improve post-operative range of motion and become accustomed to the new prosthetic joint.

CONCLUSION

For patients suffering from great toe joint pain, lack of pain-free range of motion and end stage bunions, great toe joint replacement offers effective relief. Due to advances in surgical techniques and higher-quality prosthetics, there is a reduced likelihood that individuals will require additional surgeries. Toe joint replacement helps preserve motion and gets patients back to the activities they once enjoyed without requiring traditional fusion surgery.

If your patient is suffering from great toe joint pain, or limited motion in the foot, feel free to contact Tower Foot & Ankle Surgery for questions or a consultation. You may also email Dr. Jamshidinia with questions at DrJ@LAfootdoc.com.

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