Northwestern Medicine
Feinberg School of Medicine

Northwestern Memorial Hospital – Lavin Pavilion
259 E Erie St. Chicago, IL 60611
(312) 695-6800

NORTHWESTERN
DEPARTMENT OF ORTHOPAEDIC SURGERY

Dr. Milap S. Patel

Dr. Anish R. Kadakia

Foot & Ankle Deformities

The foot and ankle is a complex unit consisting of bones, tendons and ligaments that provide an intricate balance to support the body for standing, walking, and running. Conditions such as arthritis, tendon problems, ligament laxity (looseness), difficulty with shoewear, fractures are commonly related to the shape of the foot and not simply isolated to the condition that is directly related to the pain. For example, in the case of posterior tibial tendon pain, the shape of the foot is typically "flat" and the tendon pain cannot be treated without treating the foot shape (non-surgically or surgically). In others, fractures of the 5th metatarsal, peroneal tendon pain, or instability can be associated with a high arched foot and treatment must take into consideration the shape of the foot to provide a long-term solution. Even some cases of 2nd hammertoe pain may be secondary to a painless bunion that would have to be treated in order to provide more reliable relief from correction of the second hammertoe

The physical examination is critical to understand the relationship of the patients' current complaint and difficulties in relation to the biomechanical aspects of the foot and ankle. The standing alignment and mobility of the ankle and foot are evaluated to determine if the foot mechanics are contributing and if they must be addressed in order to provide relief. Xrays are taken - weightbearing - in order to determine the bony alignment and this may be required despite the fact that patients may come with prior MRIs or other imaging. Weight-bearing xrays are critical to understanding the alignment of the foot and ankle. Further imaging with a weight-bearing CT may be ordered to understand more subtle aspects of the deformity if present in order to create a refined surgical plan to optimize the surgical outcome.

Treatment does not always require surgical intervention, however, orthotics or bracing may be discussed in order to treat the deformity in addition the underlying presenting complaint. If surgery is required, patients can find it difficult to accept the additional surgery to restore a more neutral alignment when the pain is focal to one location. We will do our best to explain why we feel this is biomechanically appropriate and will work with you to formulate what we feel is an appropriate surgical plan. Deformity correction may require osteotomies to break the heel bone or the 1st metatarsal. Isolated fusions are sometimes required to restore balance. For example, a patient that presents with ankle arthritis in addition to a high arch may only note that they have pain in the front of the ankle. After a thorough exam and radiographic examination, many patients may require a large reconstruction of the foot to reshape the foot with a combination of fusions and osteotomies. Following healing of this reconstruction a staged ankle replacement can be done to restore function and minimize pain. Although this seems like a lot of surgery, putting an ankle replacement with a persistent deformity not only fails to provide long-term relief, can make salvage much more complex as we have noted in treating these patients from outside institutions that have come for continued pain.