

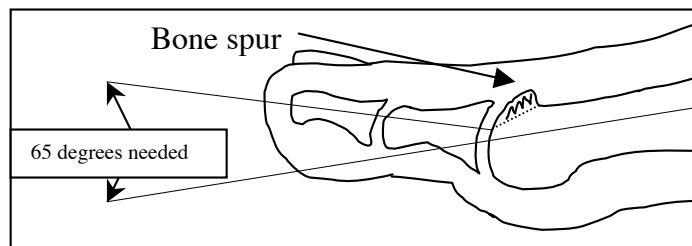
What is it?

Hallux limitus is a limitation in the movement of the big toe (hallux) in the upward direction. If it becomes severe, the movement is non-existent and the condition is called hallux rigidus. 65 degrees of upward movement of the toe are required in normal gait as the heel lifts off the ground.

Bellevue Podiatric
Physicians

Hallux Limitus

Hallux rigidus



How did I get it?

Many times this condition is congenital and is due mostly to the bone structure you were born with. Occasionally, the condition is from trauma or improper shoe gear.

It is a vicious cycle in that the more the joint motion is limited, the more jamming occurs at the joint with normal ambulation. This causes a bad condition to get worse!

Pathomechanics:

As the joint motion is limited, a large bone spur will form on the top of the great toe joint. This is called a 'dorsal union'. The cartilage in the joint will gradually decrease until there is almost none. Over months to years the joint will completely destroy itself and there will be no motion at this joint!

As this process occurs, your pain may actually lessen. This is because your body is trying to reduce the painful motion. You will eventually end up with little to no motion at this joint and therefore little to no pain at this joint. If you have a bunion, it will never go away unless surgically removed.

Treatment

Shoes The two aspects of a shoe that are important are #1 a stiff sole, and #2 a rocker bottom sole. This is where the bottom of the shoe curves up to the toe, allowing the shoe to 'rock' up on the toe without requiring the big toe to bend. Trail running shoes are a good category of shoe to look at for this condition.

In shoe devices Sole stiffeners made of thin graphite are useful in keeping the shoe stiff. Steel shanks can be used for this purpose as well, but the cobbler must do this. *Custom molded foot orthoses are very helpful* in alleviating hallux limitus pain. These function by canting the foot to the outside to take the pressure off the big toe during the toe off part of the gait cycle.

Surgical procedures

A **cheilectomy** is a simple procedure to remove the spurring and 'clean up' the arthritis in the joint. Recovery is relatively little with this procedure.

A **decompression osteotomy** is sometimes performed to shorten the metatarsal thereby creating a relative 'slack' in the soft tissue structures around the joint. This involves a bone cut and fixation with a screw, so you will be on crutches for 2 weeks. A **dorsiflectory phalanx osteotomy** is a way to move the big toe upward thereby requiring less upward movement of the joint itself. This will also require a pin or screw and a short time on crutches.

A **Joint Fusion** is rarely needed, but is where we remove any remaining cartilage and fix the joint in a functional position permanently so it will never move. There will be fixation across the joint so it will eventually fuse as solid bone. After healing you can still run and go barefoot with ease, but wearing high heels may be difficult.