

Foot and Ankle Problems

The foot and ankle work together...although your foot and ankle are pain free, they may cause pain or weakness in other areas

Key points to keep in mind about how your foot and ankle work:

- The arch of the foot and the muscles around the knee act as a spring to absorb shock.
- The arch flattens and the knee bends as body weight is transferred over the foot with each step.
- The arch of the foot reforms during gait to create a rigid lever to help propel the body forward.
- The small amount of motion that occurs at the joints of the foot and ankle has a tremendous impact on how joints and muscles of the leg, trunk and upper body function during any activity where the feet are planted on the ground.
- Motion occurs in three directions (planes of motion) at all joints of the body including the foot and ankle. These planes allow motion from front to back, side to side and in a rotational or twisting direction.
- When the foot first strikes the ground, the proper amount of controlled motion that occurs in the three planes of motion allows key muscles in the hip and torso to activate and stabilize the joints of the leg and spine. The foot is frequently the first link in the chain of joint and muscle reactions that allows us to perform dynamic activities such as walking, running, hitting a golf ball or hiking on uneven terrain with stability and balance.
- A pain free foot and ankle that is limited in mobility or does not provide enough stability can be a major contributor to pain and weakness in areas far removed from the lower leg.
- A foot with an arch that is too high or too low tends to be a poor shock absorber. This can lead to an overload of force on the joints and muscles of the hip and back.

Frequent Complaints:

- Sharp pain in the sole of the foot that occurs when standing or walking after a period of sitting or lying down...
- Heel or mid calf pain when walking or running
- Pain in the knees when ascending or descending stairs
- Hip pain, buttock or low back when walking or standing
- Difficulty balancing during dynamic activities such as throwing a ball, swinging a golf club, or walking on uneven surfaces.

Physical Therapy for the Foot and Ankle:

- Improving foot and ankle mobility may require manipulative treatment to improve your ability to move with balance and stability.
- Exercises should help stimulate and strengthen muscles around the leg that directly affect foot

control as well as muscles of the hip and abdomen that control the shifting of body weight onto the foot. In our opinion, the best exercises are those that closely resemble actual foot function in an upright position.

- Shoe wear considerations are important to improve foot function. Your therapist or physician at Buffalo Spine and Sports Institute will make a recommendation based on an examination of your foot and by observing how your foot moves when walking. Please refer to the article on Foot Types and Shoes.
- Orthotics (custom or "over-the-counter" shoe insoles) are occasionally required to help improve leg and trunk muscle activity. They are not a replacement for exercise and manual treatment. Many failures in orthotic management can be traced to either an incorrect orthotic prescription, for example a device that is too rigid for an already rigid foot and/or a lack of exercise training to improve the patient's leg strength and control of weight shifting in gait. At Buffalo Spine and Sport Institute, we have found that the best approach to foot management is to optimize the mobility and strength of your leg and foot first, then, prescribe orthotics to help improve and maintain improved foot and leg function.

Please refer to the article on different types of Orthotic Options available at Buffalo Spine and Sport Institute.

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