

## Midfoot Arthritis



The midfoot consists of the bones and ligaments in the middle of the foot, that connects the forefoot (toes) to the hindfoot (heel bones). The primary function of the midfoot is to provide stability and to be a rigid platform for transferring force from the ankle to the foot. Arthritis can occur from trauma (Lisfranc injury) or from degeneration of the cartilage over time that occurs with age. When the ligaments and/or bones of the midfoot are injured, this results in a loss of stability to the foot, that can result in pain and worsening deformity (flatfoot). The goal of treatment is to maintain and restore the stability of the midfoot and minimize pain. The most common complaints are pain across the top of the middle of the foot along with difficulty with footwear secondary to the bony prominences that develop.

The physical exam can show bony prominences on the top of the foot that make footwear difficult. These are spurs that develop from the lack of cartilage and the increase stress on the bones. The spurs themselves are merely a sign of the arthritis and removing the bony prominence will not solve the problem and in some cases can make it worse as the foot is destabilized. Contracture of the calf muscle is

common with this condition and is assessed by exam. X-rays are reviewed to determine the extent of the arthritis and what joints are affected. The midfoot is a complex association of different bones and multiple joints can be involved, making treatment reliant upon detailed radiographic examination and advanced imaging. In most cases further imaging with a weightbearing CT is ordered.

Non-surgical treatment focuses on minimizing the stress to the foot, including activity modification, shoes with a rigid insole and cushioned sole with a rocker to them. Injections can be considered, however, rarely provide a long term solution. Fusion of the affected joints in the midfoot is the most reliable and effective operation. A fusion is where the cartilage is removed and bone graft may be additionally used to “glue” the bones together - so that they become one block of bone. The benefit of this is that the midfoot is stable and if the fusion heals, will stay stable for life. A concern that many patients have is that a fusion will eliminate the motion between the joints, however, in the case of the midfoot, the primary function is stability, not motion, so there very little effect on mobility.