



South County

Orthopedics Specialist

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Midfoot arthritis

Arthritis of the foot can be brought on by different factors that include posttraumatic, inflammatory, and idiopathic which encompasses osteoarthritis which is the most common cause of arthritis of the midfoot. It is a degenerative process of the cartilage. As the cartilage wears away it becomes frayed and rough decreasing the protective space between the bones. Risk factors include age, obesity, and female gender.

The midfoot complex is composed of the naviculocuneiform, intercuneiform, and metatarsal cuneiform/cuboid joint. It has a mechanical role that allows the center of the load to be effectively transferred from the rearfoot to the forefoot during gait. In most cases, the medial and middle columns are most commonly affected especially between the second and third metatarsal cuneiform articulations.

The most common presenting symptom is described as a deep aching pain in the midfoot and arch that is worse with weightbearing, swelling may also be present. On exam longitudinal arch collapse with weightbearing, forefoot abduction, and hindfoot valgus can be noted. Decreased motion with pain at the joint and bone spurs over the joint may be palpated.

Common x-ray findings include joint space narrowing, osteophytes, subchondral sclerosis, and cysts. Studies show however, that the severity of the x-ray does not necessarily correlate to the pain the patient will experience. CT scan is sometimes ordered to access the location and extent of the arthritis in the midfoot joints.

Treatment

Nonoperative treatment

Nonoperative treatment includes offloading the midfoot through the use of shoes that have a rocker-like bottom, a stiff carbon fiber shoe inserts to decrease the amount of bend through the midfoot, or a cortisone injection under fluoroscopy. Over the counter or prescription strength NSAID's in combination with the above can also be useful.

Operative treatment

Surgical options include midfoot arthrodesis which fuses the problematic bones of the midfoot. An incision will be made on the top of the foot over the metatarsal that will be fused. Screws and small plates are usually used in conjunction to provide compression between the arthritic joints. By fusing the joint or joints the two bones no longer rub together which once caused an

inflammatory response resulting in pain. There is minimal motion through the midfoot, thus fusing the joints minimally affect the ability to walk. If the arthritis is in the lateral column, arthrodesis is not implicated as there is significant movement needed to be preserved. Instead joint resection may be indicated.



Post-operative care

2-week post-op: Non-weight bearing in splint, keep splint clean and dry. First post-op appointment will be at 2 weeks. You will be transitioned into a short leg cast with continued non weight bearing

6-week post-op: xrays will be taken at this appointment to check the healing status of the fusion, under most circumstances transition from the short leg cast to a walking boot will occur. These next 6 weeks, walking is allowed with the protection of the walking boot. Next post-op appointment is at 12 weeks.

12-week post-op: x-rays will be taken and you will be transitioned into regular shoes. You may begin light aerobic exercises, no high impact running or jumping.

5-6 months post-op- x-ray will be taken to check for full fusion-you may return to all activities without limitations.

FAQ

If my midfoot gets fused can I still walk?

Yes, the joints that are fused are regularly part of the medial and middle column of the foot which function as a unit with very little motion seen across these articulations during gait.

<https://www.orthobullets.com/foot-and-ankle/7036/midfoot-arthritis?expandLeftMenu=true>

<https://orthoinfo.aaos.org/en/diseases--conditions/arthritis-of-the-foot-and-ankle/sci-hub.tw/10.1016/j.fas.2015.04.004>

<https://www.footcaremd.org/conditions-treatments/ankle/arthritis-of-the-foot-and-ankle>