

Motion Sparing Procedures for Big Toe



Arthritic conditions of the great toe present with a variety of complaints- ranging from difficulty with shoewear, pain with athletic activities, to pain with activities of daily living. When considering surgical options, our goal is to determine your functional demands and what activities you enjoy and match the most appropriate surgical intervention that will provide long term functional improvement.

When considering the variety of options for joint preservation of the great toe, we have extensively reviewed the literature and discussed the most recent advances with other leading foot and ankle orthopedic surgeons to determine the effectiveness of the techniques available to ensure we provide the most appropriate care for our patients.

- Osteotomy (realigning the bone) is a technique that decompresses the great toe joint improving the pain and range of motion of the great toe when moderate arthritis is present. The surgery removes the spurs that is present and a cut in the bone is made to shift the bone to decrease the pressure on the remaining cartilage and improve the mechanics for motion of the toe. Screws are required to secure the bone back together after the cut is made. This operation can help preserve motion and

decrease pain within the great toe for patients who are candidates based on the xrays and in whom preserving motion is the most important concern. Patients should understand that in some cases, residual discomfort can be present and if the surgery does not provide sufficient relief a fusion may be required. The benefit of this procedure over a joint replacement or Cartiva® is that there has not been significant removal of bone and the fusion is a technically routine operation that does not require large amounts of bone graft.

- Interposition arthroplasty is done for patients who have severe arthritis in whom motion is more critical to their lifestyle. This operation involves placing tissue in between the two bones after removing the spurs and decompressing the joint so that the two bones (phalanx and metatarsal) do not grind on each other. Patients should understand that in some cases, residual discomfort can be present and if the surgery does not provide sufficient relief a fusion may be required. The benefit of this procedure over a joint replacement or Cartiva® is that there has not been significant removal of bone and the fusion is a technically routine operation that does not require large amounts of bone graft.
- Joint replacement of the big toe is an operation that has not demonstrated superiority to a fusion of the great toe and we do not perform that surgery currently on our patients. Revision surgery for continued pain after a joint replacement of the great toe is complex and requires a significant amount of bone graft and is not the same as doing a primary fusion. We continue to review newer implants and the literature and although currently we do not feel this is ideal for our patients, continue to evaluate this procedure as a potential option if the scientific literature demonstrates superiority over fusion
- “Synthetic cartilage” known as Cartiva® is currently on the market and is an option for hallux rigidus. This technology has had scientific data that demonstrate an equivalent outcome to fusion with some preservation of motion. We have utilized this procedure in our patients in the past. As we strive to achieve a more long term solution for our patients, what we have noted from Cartiva® in our patients and in discussion with other leaders of Foot and Ankle in the field is that the pain relief that is commonly achieved after Cartiva® does not meet our patient’s needs. Therefore, at this time, we do not employ Cartiva® for our patients, but continue to re-evaluate the literature and discuss with colleagues for advancement in this technology and other joint sparing implants.