



# Caring for the Injured Ankle

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*Jake, 40, suffered an inversion injury to his right ankle playing tennis one week ago. He had difficulty weight bearing at the time, stopped playing and went home to ice the ankle. The next day, Jake still had pain and swelling and went to a walk-in clinic. X-rays were performed and were negative. Jake was told to take some ibuprofen and ice the ankle.*

Jake suffered a right ankle sprain with no obvious bony injury. These injuries are often poorly treated once the X-ray proves negative, but must be taken seriously from the outset, as time works against you and stiffness sets in. Ankle injuries are much easier to treat from day one, rather than a month down the road. Implement the P.R.I.C.E. (Protect, Rest-modified, Ice, Compression and Elevation) treatment right away, which helps reduce the pain and swelling and gives the physical therapist a fighting chance for rehabilitation. The patient may also need a cane or crutches.

*Jake's ankle is better, but after one month, he is still having lingering pain along the anterolateral aspect. At a friend's recommendation, he inquires about a cortisone injection.*

Jake still has discomfort in his right ankle, and this is acceptable up to six months from the time of his injury. Pain of a significant degree (*i.e.*, lasting longer than six months) should be further investigated to confirm there is no further damage to the ankle in the joint. X-rays do not show everything. A bone scan is easily accessible and a good screening test for osteochondral damage in the ankle. Remember, it is not uncommon for the anteromedial aspect of the talus to be bruised with a significant ankle inversion sprain. If the bone scan is positive, it is worthy to proceed with magnetic resonance imaging (MRI).



*Bone scan images indicated increased activity on the delayed scan in the anteromedial aspect of his talus. An MRI was pursued, showing articular damage in Jake's ankle. What does this mean for long-term management?*

From the physical examination of his right ankle, Jake had a mild/moderate degree of ligament laxity of his calcaneofibular ligament (CFL). He enjoys playing tennis and basketball, two jumping/pivoting/twisting type of activities not ideal for Jake's ankle. He should be in an ankle brace, which will help pick up for the slack that his natural ligament isn't providing. Nonetheless, he should stick with smooth/gliding activities. Remember, he already has damage in his ankle and the running and jumping will only help the wearing continue over the years to come.

*Is there anything else Jake can do for long-term care?*

Jake has permanent damage in his right ankle. People have tried taking glucosamine/chondroitin or using viscosupplementation or cortisone. The bottom line is that it is a mechanical problem. Subsequently, taking good care of the ankle over the long term by avoiding further injury, maintaining ideal body weight and using a supportive ankle brace for any more aggressive activity is the best recipe for life. Keeping the ankle strong, and working on some proprioceptive drills can also help in the long term. Orthotics can play a role for those individuals whose feet excessively pronate (leaving them vulnerable to ankle inversion sprains).

*The patient follows your recommendation, but he returns five years later with chronic pain and swelling. Can anything be offered to him?*

The last option is arthroscopic surgery. Debridement of the ankle joint can be quite therapeutic, provided there is no advanced osteoarthritis. The benefits of an arthroscopic debridement in an arthritic joint are still suspect in the long term. The orthopedic surgeon will be most helpful in determining what the potential therapeutic benefit(s) will be for your patient. Like any musculoskeletal injury, it must be treated properly right from the beginning. If not, there can be significant long-term consequences that can become irreparable.

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