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# ANKLE EXPERT

**Q: What is an ankle sprain?**

**A:** An ankle sprain is an incident where the ankle suddenly twists or turns, causing immediate pain. Some sprains are mild, and the pain resolves quickly. Others are more severe and will result in prolonged pain, limping, and swelling.

**Q: But what actually happens during a sprain?**

**A:** Ligaments are elastic structures that hold bones in alignment. A ligament is able to stretch and then return to its normal position. When a ligament is forced to stretch beyond its normal range, a sprain occurs. If this results in any tearing of the ligament fibers, swelling and bruising will occur.

**Q: But is it completely torn…in half???**

**A:** A Grade I injury is a simple 'over-stretch' of the ligament with minimal damage to the ligament itself. Grade 2 injuries involve tearing of some, but not all of the ligament's fibers. A Grade 3 sprain is the most severe and involves a complete tear, or rupture, of the ligament.

**Q: Is the same ligament always involved?**

**A:** No. There are three ligaments on the outside of the ankle that can be involved in a typical sprain, but the ATFL (antero-talo-fibular ligament) is the one most commonly injured. It is important for your doctor to distinguish this from an injury to the ligaments that run between the two bones of the leg (tibia and fibula). An injury to this area denotes the dreaded 'high ankle sprain' which can require a vastly different treatment protocol and healing time.

**Q: When do I need to see an orthopaedic surgeon?**

**A:** Any sprain associated with noticeable swelling, bruising, or difficulty putting weight on the leg should be evaluated by your physician. X-rays are usually obtained to ensure that there is no fracture. The injury can be graded and information provided regarding an estimated time to recovery.

**Q: Really? My Dad said to just 'rub some dirt on it' and get back in the game.**

**A:** I disagree with the notion that all sprains can simply be 'walked off.' This may be true for some, but it is important to identify exactly which structures are injured. Then, a treatment protocol can be tailored to the individual athlete and his or her goals. In this way, important injuries are not overlooked. Just as important, there is less risk of *over*-treatment and unnecessary loss of fitness and playing time.

**Q: What can I expect as far as treatment?**

**A:** Management of ankle sprains is based on the 'grade' or severity of the sprain and any associated injuries. Most physicians familiar with sports medicine will divide the treatment into specific phases.

*Phase 1* is directed towards reducing swelling, protecting the injured ligaments, and beginning weight-bearing activities. Ice, compression, and elevation are very important initial measures. The 'level' of protection of the ligaments (i.e. brace, walking boot, or cast) is chosen based on which will permit weight-bearing as soon as possible.

Once swelling is down and you are walking without pain, *Phase 2* begins. This involves regaining range of motion of the ankle and restoring strength.

*Phase 3* is often omitted by patients and involves regaining the proprioception, or position sense, of the ankle. Exercises such as single leg balance are important in this regard. I find that many patients who continue to have instability after a sprain have simply not regained this vital function.

*Phase 4* is sport-specific rehabilitation and is tailored to the individual.

**Q: Well, I had a bad sprain 2 months ago and it still hurts and swells… is this typical?**

**A:** No, this is not expected behavior for a sprain. At this point, I definitely recommend evaluation by your orthopaedic surgeon if this has not already been done. The work up will include a detailed physical exam and x-rays. An MRI may be indicated at this point if there is suspicion for other injuries.

**Q: What *other* injuries, I thought this was all about the ligaments?**

There are many other structures that may contribute to pain after ligaments have healed. These include tendon injures, cartilage damage inside the joint, and even nerve injuries.

**Q: Wow, I had no idea that ankle sprains can cause so many problems!**

While it is true that some sprains can be troublesome, the vast majority of these do very well. Most individuals recover from the acute injury and have no long term problems or limitations.

Now get back out there and have fun!