



## **Ankle sprain**

An ankle sprain is an injury which results from a sudden movement that goes beyond the normal range of motion of the ankle – a trauma. The amount of damage varies depending on the size of the trauma. The more ligaments involved, the more serious the injury. It can go from a mild ligament tear up to damaging the muscles, tendons and even bones.

The success of recovery is reliant on treatment. Treated well, it should recover fine. Ignored, it may become chronic.

An Inversion sprain is when the outside of the ankle is injured. This is the most common, accounting for 80% of sprains. There are 3 ligaments on the outside of the ankle which can be damaged.

An Eversion Sprain is when the inside of the ankle is damaged, the Deltoid ligament. These account for less than 20% of sprains.

Sprains are classified according to the amount of damage to the area. A thorough Physio assessment will give you an accurate diagnosis.

A 1<sup>st</sup> Degree sprain is mild tearing and stretching of the ligaments. It has mild if any swelling and no instability. Treatment is immediate RICE for 1-2 days then balance and strength exercises. Return to sport is anywhere from 3 days to 2-3 weeks

A 2<sup>nd</sup> Degree sprain is partially torn ligaments with injury to one or more of the ligaments. There will be swelling and bruising. After immediate RICE for 2-3 days you will then need crutches and physio. Return to sport takes 3-6 weeks.

A 3<sup>rd</sup> Degree sprain is complete rupture of 2 or more ligaments and may involve a fracture of the bone. There is swelling and bruising. Due to compression of the surrounding tissues and bones there is pain on the opposite side to the injury. Treatment is immediate RICE for 2-3 days, then physio. You may need an X-ray, and in rare cases surgery to repair the damage. It can be 12 months before an ankle fully recovers from a 3<sup>rd</sup> Degree sprain

Physio treatment of a sprain includes

- Accurate assessment to reduce joint stress
- Specific joint mobilisations
- Specific accurate taping to protect the injured joint and ligaments but still allow freedom to function
- Advice to assist your injury and plan for a quick return to sport



Pain-free mobilisation from a Physiotherapist as soon as possible make a difference to rate of recovery.

You should always be 'guided by your pain'. This means you move your ankle as much as you can without any pain, but as soon as it hurts you've gone too far and you need to do smaller movements. If you continue doing this the range will naturally increase. If you push into the painful areas you will continue to inflame the injury and slow the recovery down.

Exercise the ankle in the pain-free range as much as possible. Exercises fall into 2 categories. Range of Motion and Proprioception.

### Range of motion

Do as many of the following exercises as you can and as you recover you will find you can do more and the movements will be bigger.

- Sit with your foot resting on your other knee. Hold the injured foot in your hands and gently move it around in all directions.
- Use your hand to point and flex your foot in the pain-free range
- Point and flex your foot without helping with your hands
- Point your foot, now move your toes from side as if you were drawing an arch with your toes
- Stand without putting weight on the injured foot. Gently bend the injured ankle as far as you can.

### Proprioception

Keep practicing these until they are easy. These are very good at preventing another injury. Ankles that aren't rehabilitated have a high rate of re-occurrence.

It may be a few weeks before you can do these without pain.

- Stand on both feet with hands touching a wall, and then lift the uninjured foot off the floor. Try to balance for 30 seconds without holding the wall. You may need to hold the wall for the first couple of days. Try to keep your body still and let your foot be soft so your ankle moves as you try and get your balance.
- When you can stand on one foot without holding the wall try closing your eyes
- If you can, try balancing on a 'wobble board', standing on both feet with your eyes open for 30 seconds



When your recovery has progressed and you are ready to start jogging, jog in a straight line. Then progress to S jogging, or doing large figure 8's. When these are pain-free progress to practicing cuts, zig-zags and stop and starts.

When zig-zags are pain-free you can return to sport.