

Department of Physiotherapy

LATERAL ANKLE SPRAIN

Ankle sprains typically happen when the ankle is twisted in an awkward position, overstretching the ligaments present as a result. Ligaments are fibrous connective tissues in the ankle. Inversion ("rolling inwards") injuries resulting in lateral ankle sprains are most common. This can occur by accident, like stepping on a stone or slipping on a wet surface, or during sports.

SIGNS AND SYMPTOMS

There can be swelling, redness or bruising present after an ankle sprain. It can also be painful to stand or walk.

HOW CAN PHYSIOTHERAPY HELP?

If necessary, your doctor may order for further investigations such as an x-ray to rule out fractures.

Physiotherapy can help with pain management after an ankle sprain, and to restore ankle movement, strength and function. Comprehensive rehabilitation can also help to reduce the risk of recurrent sprains¹.

MANAGEMENT PROGRESSION (I) ACUTE STAGE

Following the **(P)** RICE regime for the first 2-3 days can be useful to manage pain and swelling following injury.

ANATOMY



The ATFL (Anterior Talofibular Ligament) as one of the most commonly affected ligament in a lateral ankle sprain.

TIPS TO HELP YOURSELF:

Do no **HARM** during the acute stage of injury: -

H – Heat and heat rub

A – Alcohol consumption

R – Re-injury/ Running

M – Massage

Being confident and optimistic with your rehabilitation also leads to better rehabilitation outcomes¹.

Disclaimer: The material contained in this information sheet is intended as a guide only and does not constitute advice or treatment. For further information please see your qualified healthcare professional.

(Protection) Optional	Depending on your doctor's orders, a short period of complete immobilisation (as in a plaster or rigid support) may be recommended for pain and swelling management.
Rest	Avoid activities that cause excessive pain. Functional bracing or rigid taping can be useful. Crutches may be used to offload the ankle. This allows healing to take place and prevents unnecessary strain to the injury. However, gentle movement exercises are beneficial, and also help to reduce swelling.
Ice	Wrap ice in a towel and place it over the ankle for $^{\sim}$ 20 minutes each time for pain management. Cryotherapy, in combination with exercise, has been shown to improve ankle function in the short term ² .
Compression	Apply firm bandaging from toes to above the ankle to reduce swelling over injured site. Avoid applying it too tightly.



(II) EARLY REHABILITATION PHASE

After acute pain and swelling has settled, your physiotherapist will help you return to your usual activities. This can include gait retraining and various therapeutic exercises based on your recovery.

Exercises include

- range of motion
- progressive ankle strengthening
- balance exercises

Cardiovascular activities are also important for recovery². Maintain your physical fitness during your rehabilitation through activities like cycling and swimming.

(III) RETURN TO SPORTS/ WORK

Based on your goal, your physiotherapist will also assist you in returning to sports or work. This can take up to 6-8 weeks¹. It is important for you to complete your rehabilitation journey prior to return to sports or work.

PERSISTENT PAIN AFTER LATERAL ANKLE SPRAIN

Most people with lateral ankle sprains see improvements in pain, swelling and function about 3 – 6 weeks after injury. Should you have persistent pain and/or limitation in movement, it may be advisable to consult a medical professional.

Disclaimer: The material contained in this information sheet is intended as a guide only and does not constitute advice or treatment. For further information please see your qualified healthcare professional.

REFERENCES

- Vuurberg, G., Hoorntje, A., Wink, L. M., Van Der Doelen, B. F. W., Van Den Bekerom, M. P., Dekker, R., ... Kerkhoffs, G. M. M. J. (2018). Diagnosis, treatment and prevention of ankle sprains: Update of an evidence-based clinical guideline. *British Journal of Sports Medicine*, 52(15). https://doi.org/10.1136/bjsports-2017-098106
- Dubois, B., & Esculier, J.-F. (2019). Soft-tissue injuries simply need PEACE and LOVE. British Journal of Sports Medicine, 54(2), 72–73. doi: 10.1136/bjsports-2019-101253

Department of Physiotherapy

Restoring movement



Gentle ranging exercises include moving the ankle up and down, in and out.

Restoring strength

Gradual progression of strengthening exercises



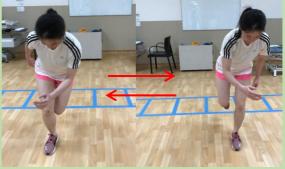
The calf muscles can be strengthened with exercises (such as by using resistance bands or using your body weight as resistance).

Restoring function



Lower limb balance can be challenged with uneven surfaces.

Returning to sports or work



Dynamic movements such as lateral hops and landing are also part of rehabilitation prior to return to sports.



