

Children's Ankle Sprain or Avulsion Fracture

Information for Patients

Important contact information

Physiotherapy Department – 0131 3121079

What is an ankle sprain?

A sprained ankle is an injury that occurs when you roll, twist or turn your ankle in an awkward way. This can stretch or damage the tough bands of tissue (ligaments) that help hold your ankle bones together.

Ligaments help stabilise joints, preventing excessive movement. A sprained ankle occurs when the ligaments are forced beyond their normal range of motion. Most sprained ankles involve injuries to the ligaments on the outer side of the ankle but can also sometimes involve the ligaments on the inside of your ankle too.

Treatment for a sprained ankle depends on the severity of the injury but most recover well with a little time and then simple rehab exercises once the pain has settled.



What is an avulsion fracture?

Sometimes a small piece / flake of bone may be pulled off where the ligament attaches to the bone. These are minor fractures and do not need a plaster cast. Your child may be given a moonboot to wear for up to six weeks depending on their level of pain.

Avulsion fractures are treated in the same way as a sprain. These fractures may take several weeks to heal, but sometimes your child may have some pain and swelling for three to six months. Swelling and bruising at the injury/fracture site is normal.

What is the best treatment?

Immediately after an ankle injury it is important to manage it correctly, it is very important to keep your ankle moving as best as possible as well as trying to reduce the pain and swelling.

The current guidance on treating soft tissue injuries follows PEACE and LOVE principles;

P		PROTECTION Avoid activities and movements that increase pain during the first few days after injury.
E		ELEVATION Elevate the injured limb higher than the heart as often as possible.
A		AVOID ANTI-INFLAMMATORIES Avoid taking anti-inflammatory medications as they reduce tissue healing. Avoid icing.
C		COMPRESSION Use elastic bandage or taping to reduce swelling.
E		EDUCATION Your body knows best. Avoid unnecessary passive treatments and medical investigations and let nature play its role.
&		
L		LOAD Let pain guide your gradual return to normal activities. Your body will tell you when it's safe to increase load.
O		OPTIMISM Condition your brain for optimal recovery by being confident and positive.
V		VASCULARISATION Choose pain-free cardiovascular activities to increase blood flow to repairing tissues.
E		EXERCISE Restore mobility, strength and proprioception by adopting an active approach to recovery.

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What if I need pain relief?

To manage your pain and keep your ankle moving it is advised that you initially take regular simple pain relief. This can be bought over the counter from a pharmacist. If you have any allergies or conditions which affect the use of pain relief or any questions or concerns please seek advice from your GP or a pharmacist.

Rehabilitation and Recovery

If you follow this advice leaflet your injury should take around 6-8 weeks to heal. However, everyone recovers from injuries at different rates and it is dependent on the severity of the injury, the soft tissue that was involved and the presence of any other medical problems.

Weeks since injury	Goals and expectations.
0 - 2	<p>If you have been given a moonboot and/or crutches in the Emergency Department (ED) use these as required in the early stages. You should attempt to wean off them as soon as possible and resume normal activities as soon as your ankle feels comfortable and you feel able to.</p> <p>It is safe to move and put as much weight through your foot as you feel able to both with or without crutches. It is also safe to start the exercises in this leaflet right away.</p>
2 - 4	<p>Start to try and add in some gentle cardiovascular activity like cycling or swimming as soon as you feel able to as well as keeping other parts of your body moving like doing core stability exercises or upper body exercises if you have access to a gym.</p> <p>If after 2-3 weeks, you are still struggling with any of the following, please contact the physiotherapy department on 0131 3121079 and ask to make a self referral;</p> <ul style="list-style-type: none">- Still having difficulty fully moving your ankle in all directions- Still have significant swelling (small amounts of swelling may remain)- Are unable to put all of your weight through your leg without crutches- Have a feeling that your ankle is going to give way when walking
4+	<p>Gradually progress through all of the exercises in this leaflet over the next few weeks.</p> <p>If you have followed all of the exercises within this guide and gradually built up your activity levels it is safe to start re-introducing more challenging activities such as gentle running and jumping.</p> <p>You can also start adding in more sport specific activity as you feel able to and make a gradual return to training and PE. Remember to always be guided by your ankle – a little bit of pain and or swelling that goes away quickly is normally nothing to worry about but if you are experiencing high levels of pain and or swelling that don't settle quickly you should contact the physiotherapy dept on 0131 3121079.</p>

Initial Exercises

Try and start working through the following exercises as soon as you can – it is safe to start these exercises right from the day after your injury;



1. Sitting with your legs out in front of you or in a chair.

Gently move your ankles up and down and round in circles. Just move your ankle as much as you can to start with and try and gradually build up your movement over time.

Repeat 3x10 times, regularly throughout the day.



2. Elevate your leg regularly, especially if you have been at school all day or doing a lot of walking around. This can be done lying on the floor with your leg up on the sofa or bed or lying on the sofa with your leg up on the arm rest. Try and keep your foot and ankle moving whilst your leg is elevated which will help reduce swelling in your leg.

Aim to have your leg elevated for approx 10-15 minutes at a time.



3. Stand in front of a sturdy chair or surface with your weight evenly distributed between both feet. Push up onto your toes as high as you can, hold for a couple of seconds and then slowly lower your heels back to the floor.

Repeat 3x10 times, twice daily.



4. Practice standing on your injured leg. Initially do this somewhere you can hold on for support, such as a kitchen worktop, and try to hold your balance for 30 seconds to a minute.

Think about working your thigh and bottom muscles to keep your leg straight and strong.

You can progress this exercise by balancing on one leg whilst you are cleaning your teeth, throwing and catching a ball or looking up/down and side to side whilst standing on one leg.

Exercises progressions

Start these exercises as soon as your movement has returned and your pain has settled;



1. Stand on the edge of a small step if you have one or just the floor on your affected leg. Push slowly up onto your toes as high as you can, hold for a couple of seconds and then slowly lower back down.

Repeat 3x10 times each day.



2. Stand on one leg on a stable surface, hop sideways landing on your other leg, keeping your balance when you land then hop back onto your other leg again. Continue for 30 seconds, rest then repeat 3-4 times.

Repeat 2-3 times each day.



3. Stand on your affected leg in front of a sturdy chair. Slowly sit down into the chair until you touch it with your bottom/backs of your legs then stand back up again.

Repeat 3x10 times each day.



4. Stand at the bottom of your stairs or in front of a high step. Place your injured leg up onto the step and step up like in the picture, try to keep your other leg off the step then slowly step back down keeping the movement smooth and controlled.

Repeat 3x10 times each day.

Return to sports and activity

Once your ankle is no longer painful and the movement is much better you can gradually return to gentle activities.

As your ankle continues to feel better you can gradually return to your usual activities ensuring you warm up and cool down fully.

If you feel as though you are able to, you do not have to wait for the go ahead from a health professional to return to your normal activities.

Do I require further treatment?

If you have regained full movement at your ankle, are able to walk and run pain free and have been able to return to your normal sports and activities you don't need any further assessment or treatment.

If you do have any concerns or are struggling to return to your normal activities please call the physiotherapy department to make a self referral.

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