

Participation in sport is important for children as it teaches them how to work in a team and enhances their motor skills. However, with sports, injuries can always arise. These injuries may be minor or serious and require assessment and management by a physiotherapist.

It has become common for children to be participating in high loads of training for a specific sport or may be participating in a range of sports. The increase in training volume leads to an increased rate of injury. As children are still growing, the injuries they are prone to getting are often quite different to those of adults.

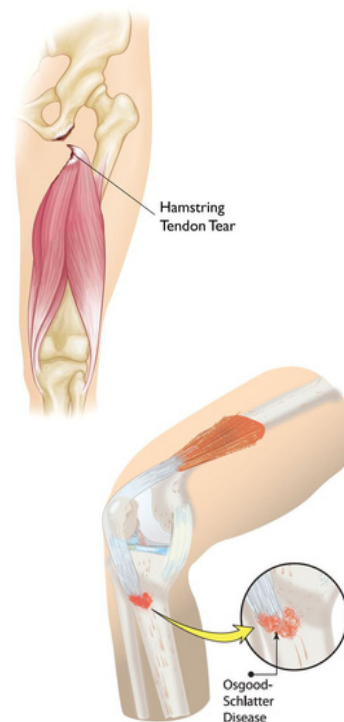
Common injuries in children include:

Apophyseal injuries:

The bony attachment is the weak point with children. It is an irritation or separation of the growth plate between the bony anchor for the tendon and the parent bone. They can either be:

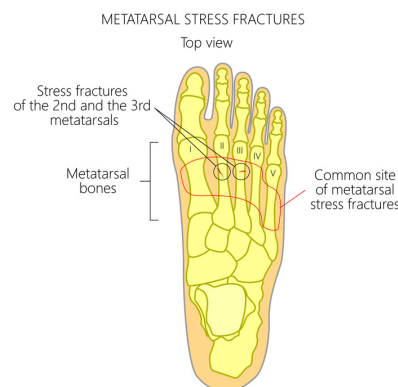
- **Avulsion** - occurs when a high force causes sudden separation of the bony attachment from the growth plate. Common sites include:
 - The ischial tuberosity or sitting bone. This is your hamstring attachment.
 - The AIIS. This is your quadriceps attachment to the front of your pelvis.
- **Apophysitis** - is where repetitive high traction loads cause irritation and inflammation of the growth plate. Most common in active kids 10-14 years old. Common areas include:
 - Tibial tuberosity or the bump at the top of your shin just below the knee. This is known as Osgood-Schlatter Disease.
 - Achilles tendon insertion into the heel. This is known as Sever's Disease.

Physiotherapists can provide a diagnosis and imaging if an avulsion is suspected. Treatment will often involve load modification (rarely complete rest), soft tissue massage, and strengthening and stretching exercises to help with biomechanical abnormalities.



Fractures:

- **Broken bones** - can occur as a result of trauma. A physiotherapist can advise if an X-ray is required. Common sites include the wrist, collarbone, fibula and ankle.
- **Stress fractures** - caused by repetitive force, often from overuse but can also be associated with bone health issues. Initially, a stress reaction develops, and this can progress to a stress fracture if the bone is not offloaded and allowed time to heal. Imaging is often required with medical and/or dietary advice, which is often part of the management. Common sites include the lumbar spine, foot or shin bones.



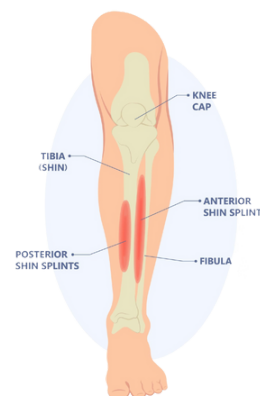
Your Physiotherapist can diagnose the issue and organise appropriate imaging and referrals. Once the bone has healed, they can address any biomechanical reasons for the overload, adjust training loads if required, and advise on a safe path for a return to sport. They will often prescribe some strengthening and stretching exercises to assist with this.

Shin Splints:

They are also known as Medial Tibial Stress Syndrome. Pain can be felt anywhere along the shin bone from knee to ankle but commonly along the middle to lower third.

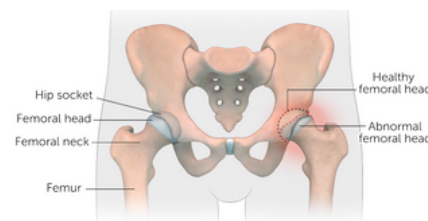
It is an overload issue of both tendon attachment and bony lining, which can be related to an increase in training load, often combined with some biomechanical factors. Initially, symptoms are felt at the start of training but can improve as training continues, only to return at the end of the session.

Your Physiotherapist can help differentiate this from a bony stress reaction in your shin as they are managed differently. Activity modification and strengthening exercises will be required.



Perthe's Disease:

This disorder affects the hip joint, usually in children between the ages of 3-11. Transient blood supply impairment to the hip joint ball leads to the ball gradually losing its round shape. Symptoms can include a limp, pain in the knee, thigh or groin and hip joint stiffness. Most children do recover fully from this condition but often require medical intervention.



Slipped Capital Femoral Epiphysis (SCFE):

This is a disorder of the growth plate of the femur (thigh bone) that lies below the ball of the hip joint. It usually affects children from ages 8-15 and requires medical intervention. Weakness at the growth plate causes the slipping of the ball from the femur. The symptoms are very similar to Perthe's Disease and include a limp, pain in the knee, thigh or groin, and walking with an out-turned foot.



The above list is just a few of the common injuries in children. Children can also develop injuries similar to those in adults. It is important to remember that an early diagnosis and treatment from physiotherapy usually leads to a quicker recovery.

