



Growing Pains

“Growing pains” are used to describe specific aches and pains that occur in children as they experience growth spurts. These pains occur at the insertion of tendons onto bone.

Causes

As children grow, the long bones of the body grow faster than the associated muscles. As a result, these extra forces cause an irritation at the insertion of the relatively shortened muscles onto the bones.

Common Sites

The most common sites for these injuries are the tibial tubercle where the patella tendon inserts into the tibia (Osgood Schlatters), and the calcaneum where the Achilles Tendon inserts into the calcaneum (Severs). However, these stress reactions can occur at other sites around the body wherever tendons join onto bones and growth occurs at a rapid or inconsistent rate. A less common site is the anterior superior iliac spine (ASIS) where the quadratus femoris attaches (iliac apophisitis).



Treatment

During the inflammatory phase, the ideal treatment is relative rest (from sport or any other aggravating activities), ice, and stretches to lengthen the appropriate muscle groups. **It is important not to directly stretch the affected musculo-tendinous unit while the inflammation is still acute, hot and swollen, as this can make the condition worse.**

The patient might need to be on crutches for a week or so if the pain is very bad, but they should not be completely non weight bearing. As the condition settles, stretches can become more aggressive and include direct stretching of the affected musculo-tendinous unit.

Eccentric strengthening of the appropriate muscle groups can also commence. Further rehabilitation should be designed to improve muscle balance around the lumbar spine, pelvis and lower limbs (both strength and length), but also to improve muscle timing and co-ordination specific to their sport or daily activities. Specific taping techniques can also assist greatly during the acute, sub-acute and return-to-sport phases by decreasing pain and improving muscle co-ordination and function. Physiotherapy is essential in the acute, chronic and rehabilitation phases to ensure appropriate progression.

Outcomes

These injuries settle very well with appropriate physiotherapy treatment and exercise prescription. However, the injury can re-occur during further rapid growth spurts and the child should be encouraged to maintain muscle flexibility to decrease the potential for future problems until they have finished growing. The condition is self limiting and will settle permanently once the child has finished growing and the growth plates have fully fused.