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## **Health Newsletter**

## **Common Causes for Leg Pain**

It is somewhat common for growing kids to complain of leg pain without a specific injury. "Growing pains" can encompass a number of symptoms that deal with the fact that children's bone lengths change at a faster rate than muscles and tendon attachments. This will manifest in pain located at or near boney protrusions (heel, pelvis or just below the kneecap). According to research the average 10-yr-old is actively growing at a steady rate of 2-4 cm/yr. This rapid growth often decreases flexibility. Physiologically, growth plates are still open and subsequently a common area for injury/stress. Growth plates are sheared by the pull of tight muscles and cause pain during increased activity, especially impact/body-weight loads. Osgood-Schlatter (knee) and Sever's Disease (heel) are common in 10-14 yr olds. Hip apophysitis (front of the pelvis bone or near the groin) is common in 14-17 yr olds. Often these pains can be managed with ice, stretching and some rest from running. Athletes can work with their coaches and a physical therapist to maximize staying in-shape while controlling inflammation and pain. Massage and foam rolling the muscles that insert onto the bone can also be helpful. Pain may also be located along the length of a muscle (in the mid-thigh or calf) and these pains are mostly attributed to muscle cramping, typically happening at night after a particularly active day. Fluids with electrolytes, stretching before and after activities and rest days will help.

Stress fractures can also be a source of non-traumatic bone pain. There are a number of factors that can lead to the development of stress fractures but a large increase in running volume, hard training surfaces, footwear and boney make-up of individuals (higher arches). Rest is necessary for stress fractures to heal so it important to identify injury early in order to minimize lost training/competition.

You should seek professional advice if your child is consistently limping, pain is severe or constant, or if there is a fever associated with muscle aches/pain. In the case of trauma, a thorough evaluation for persistent or severe pain is recommended.





Osgoood-Schlatter Pain below the knee joint caused by patellar tendon pulling on the growth plate of the tibia



Sever's Disease Condition of the heel that happens when the Achilles pulls on the growth plate of the heel bone



Hip Apophysitis Repeated movement and stress to muscles attached to a bone can cause inflammation