Osgood-Schlatter disease is one of the most common causes of knee pain in young athletes. It causes swelling, pain and tenderness just below the knee, over the shin bone (also called the tibia). It commonly affects boys who are having a growth spurt during their pre-teenage years. One or both knees may be affected.

What causes Osgood-Schlatter disease?

Doctors think that the pull of the large powerful muscles in the front of the thigh (called the quadriceps) is what causes Osgood-Schlatter disease. The quadriceps join with the patellar tendons, which run through the knee and into the shin bone, to connect the muscles to the knee. When the quadriceps contract, the patellar tendons can start to pull away from the shin bone, causing pain.

Activities that require running, jumping or going up or down stairs can make the pain worse. Osgood-Schlatter is most common in young athletes who play football, soccer or basketball or are involved in gymnastics and ballet.

How is Osgood-Schlatter disease diagnosed?

Your doctor will examine your child and discuss his or her symptoms. Your doctor may also want to get a knee x-ray to make sure the pain isn’t caused by something else.

How is Osgood-Schlatter disease treated?

Osgood-Schlatter disease usually goes away with time. When your child stops growing, the pain and swelling should go away because the patellar tendons become much stronger. Only rarely does Osgood-Schlatter disease persist beyond the growing stage.

Your doctor may want your child to cut down on time spent playing sports until the pain has been gone for 2 to 4 months. Your child may need to avoid any activity that requires deep knee bending. Your child may also need to run at a slower speed or for a shorter amount of time and jump less often.

What else can my child do to help relieve the pain?

Your child should apply ice to the painful area. Ice can help prevent swelling and relieve pain. After applying ice, wrap your child’s knee with an elastic bandage and keep your child’s leg elevated.

A memory aid that may help remind you of these four basic treatment steps is the word “RICE”.

R = Rest the knee from the painful activity.
I = Ice the affected area for 20 minutes, 3 times a day.
C = Compress the painful area with an elastic bandage.
E = Elevate the leg.

If these treatment steps don’t work, your doctor may suggest that your child wear braces that will reduce tension on the patellar tendons and quadriceps. Pain relievers such as acetaminophen (one brand name: Tylenol) or ibuprofen (some brand names: Advil, Motrin) may help relieve the pain and swelling. Your child may need to use crutches for a while to allow complete healing. As last resort, your child’s doctor may suggest surgery.

How long will it take for my child’s knee to get better?

It may take several weeks or months for the pain to completely stop. When the pain is completely gone, your child may slowly return to his or her previous level of activity.

What can my child do to help prevent Osgood-Schlatter from happening again?

Your doctor may prescribe some exercises for your child to do at home or with a physical therapist to strengthen the quadriceps and hamstrings. While your child is recovering, he or she should apply ice to the affected area after exercising to prevent pain and swelling.

In most people, Osgood-Schlatter disease goes away on its own with a little rest and time. If your child ignores
or plays through the pain, the disease may get worse and may be more difficult to treat.