

# Osgood-Schlatter Disease: a Cause of Knee Pain in Children

<http://familydoctor.org/handouts/135.html>

## What is Osgood-Schlatter disease?

Osgood-Schlatter (say: "oz-good shlot-ter") 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 occurs mostly in boys who are having a growth spurt during their pre-teen or teenage years. One or both knees may be affected.

## What causes Osgood-Schlatter disease?

It is believed that Osgood-Schlatter disease results from the pull of the large powerful muscles in the front of the thigh (called the quadriceps). The quadriceps join with the patellar tendons, which run through the knee and into the tibia, 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.

This problem becomes more noticeable during activities that require running, jumping or going up or down stairs. It's most common in young athletes who play football, soccer or basketball or are involved in gymnastics and ballet.

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 to examine your child and get a knee x-ray to make sure the pain isn't caused by something else.

## How is Osgood-Schlatter disease treated?

Your doctor may tell your child to cut down on time spent playing 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.

## How should my child's pain be treated?

If pain develops, ice should be applied to the involved areas. Using ice can help prevent swelling and pain. The knee should be wrapped with an elastic bandage and 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

aspirin or ibuprofen (brand names: Advil, Motrin, Nuprin) may reduce the pain and swelling. Your child may need to use crutches for a while to allow complete healing. As a last resort, your child's doctor may suggest surgery.

### **How long will it take for the 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.

### **Is there anything that can be done to prevent the disease from happening again?**

Your doctor may prescribe some exercises such as straight-leg raises, leg curls and quadriceps contractions for your child to do at home or with a physical therapist to strengthen the quadriceps and hamstrings. This should help prevent further problems. While your child is recovering, ice should be applied to the area after exercise 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.

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