

OSGOOD-SCHLATTER DISEASE

Description

Osgood-Schlatter disease is a common overuse injury causing pains in early adolescence just below the knee. Osgood-Schlatter disease occurs most often in children who participate in sports that involve running, jumping and swift changes of direction.



In Osgood-Schlatter disease, the enlarged, inflamed tibial tubercle is nearly always tender when pressure is applied.

A raised area just below the kneecap called the tibial tubercle is abnormally swollen and tender in this disease. The tubercle has two important functions:

- it contributes to the growth of the leg.
- it is where the thigh muscles (quadriceps) attach.

How it happens

Growth plates at each end of your long bones are made of cartilage. Another growth area is at the tibial tubercle so that as the tibia bone gets bigger the quadriceps tendon isn't still attached at the middle of the bone. During activities such as soccer, basketball, volleyball and ballet your thigh muscles (quadriceps) pull on the tendon attached to the tibial tubercle. Repeated stress causes the tendon to pull away from the cartilage too much, both stimulating abnormal growth (a bump) and resulting in pain and swelling as well.

Symptoms

Swelling of the tibial tubercle with pain are common (one in 5: 20%) in kids with year-round sports schedules. The pain varies from person to person. It improves with rest but then recurs or worsens with activities like running, jumping and climbing stairs. Some have only mild pain while performing the most rigorous activities like running hills and jumping. For others, the pain is nearly constant and debilitating. Osgood-Schlatter disease usually occurs in just one knee, but sometimes it develops in both knees. The discomfort can last from weeks to months and may continue until you are all done growing.



Treatment Options

Once the diagnosis is made, treatment is aimed at diminishing the severity or intensity of the pain and swelling. Treatment of symptoms includes taking scheduled doses of Advil or Aleve, and wrapping the knee. This is recommended until you can enjoy sports activities without discomfort or significant pain afterwards.

Physical Therapy

A physical therapist can stretch the thigh's quadriceps and hamstrings, reducing the tension on the tibial tubercle. Strengthening exercises for the quadriceps can help stabilize the knee joint. You will also benefit if you rest the joint and limit the times doing activities that aggravate the condition, such as kneeling, jumping and running.

Home Treatments

- ✓ Ice the affected area. This can help with pain and swelling.
- ✓ Stretch leg muscles. Stretching the quadriceps, the muscles on the front of the thigh, is especially important.
- ✓ Protect the knee. When participating in sports, wear a pad over the affected knee at the point where the knee may become irritated.
- ✓ Try a strap. A patellar tendon strap fits around the leg just below the kneecap. It can help to "tack down" the kneecap's tendon during activities and distribute some of the force away from the shinbone.
- ✓ Cross-train. Switch to activities that don't involve jumping or running, such as cycling or swimming, until symptoms subside.

Weakness and pain that gets worse with any activity may require rest for several months, followed by a conditioning program. In some susceptible teenagers, Osgood-Schlatter symptoms may last for 2 to 3 years. However, most symptoms will completely resolve with completion of the growth spurt. This happens at around age 14 for girls and 16 for boys.

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