Osgood-Schlatter Disease Treatment Guidelines

What is the Osgood-Schlatter disease?

Osgood-Schlatter disease (OSD) is an overuse injury causing pain and swelling just below the knee where the patellar tendon attaches to the tibial tubercle. It commonly affects active adolescents, especially during growth spurts.

Symptoms

- Pain, swelling, and tenderness below the kneecap
- Pain worsens with running, jumping, and climbing stairs
- Visible bony bump below the kneecap
- Limping after physical activity

Diagnosis

- Typical symptoms in an adolescent athlete
- Tenderness and swelling at the tibial tubercle
- X-rays sometimes used to rule out other causes

Treatment

Treatment focuses on reducing pain and swelling until the condition resolves on its own as the child finishes growing. Options include:

Rest and activity modification

Limit activities that cause pain, such as running and jumping. Lower impact exercise like swimming may be substituted. Complete rest is rarely required.

Ice

Apply ice for 15-20 minutes several times per day to reduce pain and inflammation.

NSAIDs

Over-the-counter nonsteroidal anti-inflammatory drugs like ibuprofen can help relieve pain and swelling when taken as directed.

Stretching and strengthening exercises

Gentle stretching of the quadriceps, hamstrings, and calf muscles can improve flexibility. Pain-free strengthening of the quadriceps, especially the vastus medialis oblique (VMO), is also recommended.

Other treatments that may help in some cases:

- Knee support straps or sleeves
- Formal physical therapy
- Rarely, surgery for severe persistent cases

Additional information