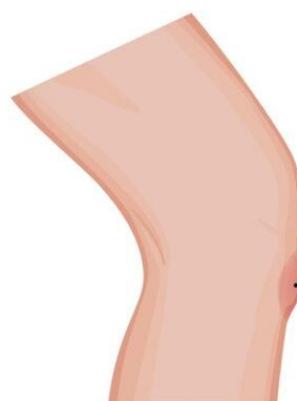
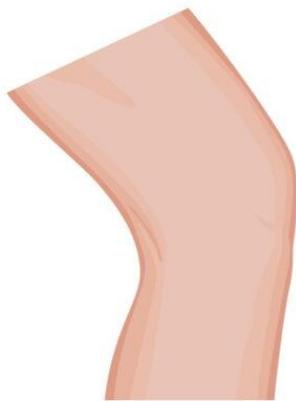


Osgood-Schlatter Disease (OSD)

OSGOOD-SCHLATTER'S DISEASE

Healthy knee of young adolescent.

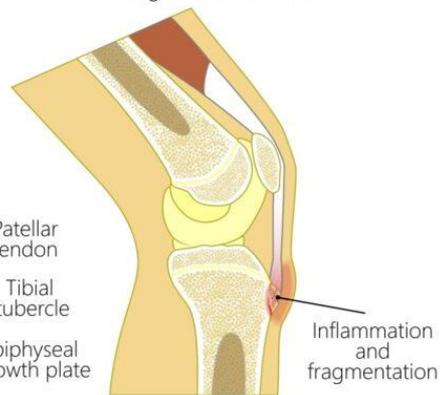
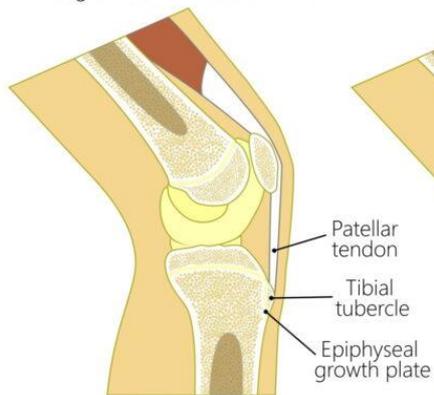
Unhealthy knee of young adolescent.



Area of pain

Sagittal section. Lateral view.

Sagittal section. Lateral view.



What is Osgood-Schlatter Disease?

Osgood-Schlatter Disease is a common cause of knee pain in growing children and teenagers. It usually occurs during periods of rapid growth, often affecting active young people who play sports that involve running, jumping, or sudden changes in direction.

The pain comes from irritation of the growth plate just below the kneecap (the tibial tuberosity), where the tendon from the thigh muscle attaches to the shinbone. It is not caused by an infection or serious injury and does **not damage the knee permanently**.

Who is affected?

- Typically children aged **9–16 years**.
 - More common in boys than girls, though increasing in girls due to higher sports participation.
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- Often occurs in children who are **very active** in sports like football, basketball, gymnastics, or running.
 - Can affect **one or both knees**.

Symptoms

- Pain, swelling, or tenderness just below the kneecap.
 - Pain worsens with running, jumping, kneeling, or climbing stairs. • A **bony bump** may develop on the shinbone just below the knee.
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- Pain usually **improves with rest**.
 - Occasionally, one knee may be more affected than the other.

Diagnosis

- Made based on **clinical examination** and the child's history.
- X-rays are rarely needed unless the doctor wants to rule out other conditions.

Treatment

Most cases of OSD **improve over time** as the growth plate closes, usually without lasting problems.

Self-care and activity management

- **Rest or reduce activity** that triggers pain (e.g., running, jumping).
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- **Ice the knee** for 10–15 minutes after activity to reduce pain and swelling.
 - **Pain relief:** Over-the-counter painkillers such as paracetamol or ibuprofen may help (ask a parent or pharmacist).

- **Supportive clothing:** Wearing knee pads during sports or using a patellar strap can reduce strain.
- **Stretching and strengthening exercises:** Gentle stretching of the quadriceps, hamstrings, and calves can help. Physiotherapy may be recommended if pain persists.

Return to activity

- Children can usually continue **light activities** as tolerated.
- Avoid forcing through pain; reduce intensity or take breaks during sports.
- Most children **fully recover** and can return to all activities once growth is complete.

When to see a doctor

Seek medical advice if:

- Pain is **severe or persistent**.
- The knee **swells suddenly** or there is redness and warmth.
- There is **limitation in movement**.
- Pain persists even after rest and simple measures.

Prognosis

- OSD is **self-limiting** and usually resolves when the growth plate stops growing.
 - Most patients **recover fully** without long-term issues.
 - Occasionally, the bony bump remains, but it rarely causes problems in adulthood.
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Osgood-Schlatter Disease Rehabilitation Exercises



Hamstring stretch on wall



Standing calf stretch



Quadriceps stretch



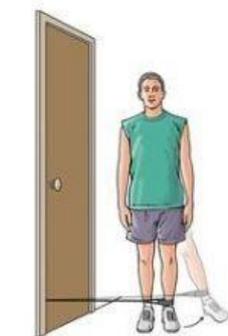
Straight leg raise



Prone hip extension



Knee stabilization: A



Knee stabilization: B



Knee stabilization: C



Knee stabilization: D

Key Points

- Common in **active growing children**.
- Pain usually improves with **rest and simple measures**.
- **Physiotherapy** and supportive devices can help.

- **Full recovery** is expected in most cases.

References:

- NHS: Osgood-Schlatter Disease
- British Orthopaedic Association – Patient Information