



Osgood-Schlatter disease, alternatively referred to as osteochondrosis, tibial tubercle apophysitis, or traction apophysitis of the tibial tubercle, is a prevalent source of **anterior knee pain** among young **athletes**.

PRESENTATION

- **Atraumatic, insidious**, anterior knee pain
- Pain on palpation of **tibial tuberosity**
- Pain **worsens with physical activity**
- **Hypertrophy** at the tibial tuberosity
- **Tight quadriceps**

PHYSICAL EXAM

- **SEADS**: inspection for **swelling, erythema, atrophy, deformity, and scars**
- Inspect for **bony protuberance** of the tibial tuberosity
- **Ely's test** for quadriceps tightness



PATHOPHYSIOLOGY

- **Overuse injury**
- Repeated **strain and microtrauma** lead to irritation
- Partial avulsion of the tibial tubercle apophysis may occur



RISK FACTORS

- **Male gender**
- Ages:
 - Boys 12-15
 - Girls 8-12
- Recent **growth spurt**
- **Repetitive activities** such as jumping and sprinting
- **Poor flexibility** of the quadriceps and hamstrings
- Common in children who play basketball, volleyball, running, gymnastic, or football

DIAGNOSIS

Osgood-Schlatter disease is a CLINICAL DIAGNOSIS

- Radiological imaging is generally unnecessary and is typically reserved for **severe cases** or situations where there is a **suspicion of avulsion**
- Consider **x-rays of bilateral knees** if symptoms are severe and/or persistent, there are concerns about a fracture or other structural issues, or the presentation is atypical



MANAGEMENT

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| <ul style="list-style-type: none"> ▪ Activity modification ▪ Cryotherapy ▪ RICE: rest, ice, compression, and elevation ▪ Nonsteroidal anti-inflammatory drugs (NSAIDs) PRN | <ul style="list-style-type: none"> ▪ Physiotherapy ▪ Stretching the quadriceps, hamstrings, and vastus medialis ▪ Patellar taping or bracing |
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