

## Osgood

Osgood-Schlatter disease (OSD) is a common condition that affects the knees of growing children and adolescents.

### **Definition:**

- Osgood-Schlatter disease is a condition that causes pain and swelling in the front of the knee, just below the kneecap.
- It is caused by inflammation of the growth plate at the top of the shinbone (tibia) where the patellar tendon attaches.

### **Physiology:**

- OSD occurs during the growth spurt of puberty when bones, muscles, and tendons are developing and changing rapidly.
- During this time, the patellar tendon pulls on the tibial tubercle (the bony bump at the top of the shinbone) causing repetitive stress and strain on the growth plate.
- This stress and strain can cause the growth plate to become inflamed and painful.

### **Symptoms:**

- Pain and tenderness in the front of the knee, just below the kneecap.
- Swelling and warmth around the affected area.
- Pain that worsens with activities that involve running, jumping, or climbing stairs.
- Stiffness in the knee after sitting for long periods of time.
- A bump or lump on the tibial tubercle (this is a sign of chronic OSD).

### **Treatment:**

- Rest: Avoid activities that aggravate the knee, such as running or jumping, until the pain subsides.
- Ice: Apply ice to the affected area for 15-20 minutes at a time, several times a day, to reduce pain and swelling.
- Compression: Use a compression bandage or knee brace to support the knee and reduce swelling.
- Pain relievers: Over-the-counter pain relievers such as ibuprofen or acetaminophen may help relieve pain and reduce inflammation.
- Physical therapy: Strengthening and stretching exercises to loosen the hamstrings can help improve flexibility and reduce stress on the patellar tendon.
- Surgery: In rare cases, surgery may be necessary to remove a bony fragment or to reattach the patellar tendon to the tibia.

### **Prevention:**

- Warm-up and stretch before exercising or playing sports.
- Wear proper shoes with good arch support.

- Avoid overuse of the knees, especially during periods of growth spurts.
- Use proper technique and form when exercising or playing sports.
- If you experience pain or swelling in the knee, stop the activity and rest.

It is important to note that OSD is a self-limiting condition, which means that it will eventually resolve on its own as the child grows and the bones mature. However, this can take up to 2 years, and the pain and discomfort can be significant during this time. Therefore, it is important to seek medical attention if your child experiences persistent knee pain or swelling.

In conclusion, Osgood-Schlatter disease is a common condition that affects the knees of growing children and adolescents. It is caused by inflammation of the growth plate at the top of the shinbone where the patellar tendon attaches. Treatment includes rest, ice, compression, elevation, pain relievers, physical therapy, and, in rare cases, surgery. Prevention includes warm-up and stretching before exercise, proper shoes, avoiding overuse of the knees, and using proper technique and form. If your child experiences persistent knee pain or swelling, seek medical attention.