What is Sinding-Larsen-Johansson Disease?

Sinding-Larsen-Johansson (SLJ) Disease is an overuse injury of the knee. It is commonly seen in growing, active adolescents between the ages of 11 and 15 years. It is often referred to as Jumper’s Knee and coincides with growth spurts.

Where does Sinding-Larsen-Johansson Disease occur?

It occurs at the lower end of the knee cap where the patellar tendon originates. (see diagram to right)

Causes

Sinding-Larsen-Johansson Disease is caused by the increased tension and pressure applied to the knee cap during activities like running and jumping. The repetitive stresses of these activities produce inflammation where the tendon attaches to bone. Having tight quadriceps muscles also puts increased pressure on the patellar attachment. Tight muscles are most common during a growth spurt.

Understanding Your Sinding-Larsen-Johansson Disease

Medication

Taking anti-inflammatory medicine or NSAIDS (non-steroidal anti-inflammatory drugs) such as Motrin, Advil, Naproxen or Aleve as directed by your doctor can be effective. This medication should be taken for 10 to 14 days to allow the medicine to build to therapeutic levels in the body. Taking the medication infrequently allows the medicine levels to drop, which decreases effectiveness.

Icing

- Ice packs or ice massage can be applied to the knee immediately after a workout for 15-20 minutes. This can be repeated every 60-90 minutes, several times a day.
- Ice massage is performed by filling several paper cups with water and placing them in a freezer. When frozen, the cup’s rim is torn off to create a ice cone. The ice is then directly applied to the sore area until the area becomes numb.

Activity Modification

- Symptoms can be relieved with resting from the athletic activities that are increasing pain.

Knee Strap

A knee strap may be ordered by the doctor to help take tension off of the patellar tendon and decrease symptoms.

Stretching

Quadriceps and hamstring stretching are recommended to help with tight muscles.

Symptoms

- Pain at the bottom of the knee cap
- Swelling at the bottom of the knee cap

Treatment Options

Treatment for Sinding-Larsen-Johansson disease includes anti-inflammatory medication as directed by the doctor, applying ice to the knee, quadriceps strengthening and stretching, wearing a knee strap, and modification of activities. There are rarely any complications and symptoms generally resolve over time.
Do you have Sinding-Larsen-Johansson Disease?

Sinding-Larsen-Johansson disease is diagnosed based on your symptoms, clinical examination, and x-rays. X-rays may be ordered by your doctor to confirm the diagnosis or to exclude other problems.

Can Sinding-Larsen-Johansson Disease be prevented?

No. There is not a 100% guarantee to prevent an active adolescent athlete from developing Sinding-Larsen & Johansson Disease.

Warming up and stretching before and after an activity may help to prevent Sinding-Larsen-Johansson Disease.