

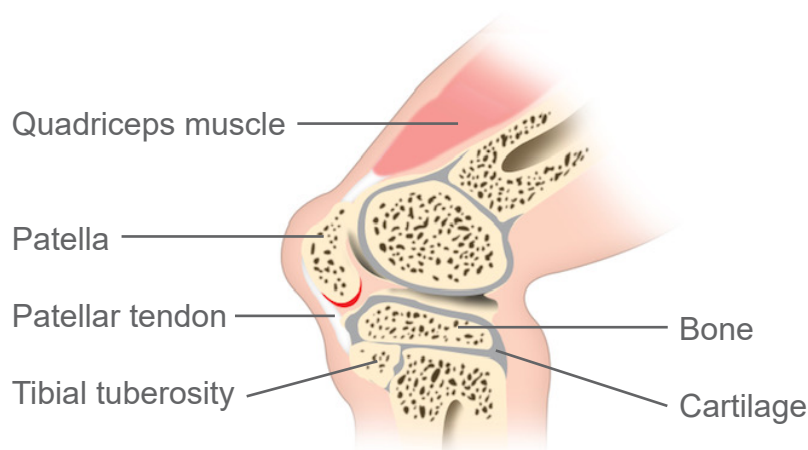
Physiotherapy for Sinding Larsen Johansson syndrome

Information for children, families and carers

We have given you this factsheet because your child has a condition called Sinding Larsen Johansson syndrome. We hope it will help to answer some of the questions you may have.

What is Sinding Larsen Johansson syndrome?

Sinding Larsen Johansson syndrome is a very common cause of knee pain in young people. It is a condition where the bottom part of your patella (known as the inferior pole of the patella) becomes painful and swollen during and after exercise.



- Sinding Larsen Johansson syndrome is more common in boys than girls during the adolescent growth spurt (usually between 12 to 15 years for boys and 8 to 12 years for girls).
- It typically affects one knee, but for up to 30% of people both knees are affected.
- Sinding Larsen Johansson syndrome is thought to be caused by the quad muscles causing local stress to growth plates during a growth spurt. This can cause injury and/or swelling of the inferior pole of the patella.
- Sinding Larsen Johansson syndrome usually develops slowly. To begin with it is mild and intermittent, but may become more severe and continuous.
- It tends to fluctuate and is often made worse by activity (such as running, jumping, or kneeling).

How long will it take for my child's knee to get better?

It may take several weeks or months for the pain to completely stop. In most people, Sinding Larsen Johansson syndrome goes away on its own with a little rest and time. However, if your child ignores the pain and plays through it, the condition may get worse and may be more difficult to treat.

After your child has treatment, their therapist will help them steadily build up to taking part in sport again, making sure the pain isn't returning. This may be by building up the length of their exercise time, 10 minutes at a time.

How to treat Sinding Larsen Johansson syndrome

1. **Rest** for a short period initially to allow the swelling to come down and the pain to decrease. We may recommend two weeks of complete rest from all activity using the quadriceps muscle. This means limiting your child's activity to essential walking only. This timescale may be increased if necessary.
2. **Ice** the affected area for 10 to 15 minutes, especially after activity if you find this helps to reduce symptoms. Make sure you protect the skin by wrapping the ice in a towel.
3. **Elevate** the leg when it is painful and swollen, especially after sports.
4. **Pain relief** may reduce pain and swelling but you need to discuss options with a pharmacist or GP.
5. **Gentle stretches** (see below). Your child should **not** do these if they increase their pain, as they may be increasing the pull on the already inflamed area.

Hip flexor stretch

1. Sit on the edge of a table.
2. Grasp one knee, pull it close to your chest and roll onto your back. Relax the other leg, letting your hip straighten and knee bend. You should feel a stretch in the front of your hip and thigh. Note: You can increase the stretch by actively straightening your hip and bending your knee. Don't let your lower back arch or hip bend.
3. Hold for 30 seconds and repeat three times. Complete these stretches once or twice a day (only if they do not increase your pain).



Myofascial release massage

We may recommend using myofascial release massage if conventional stretches are uncomfortable for your child.

Your child's therapist will teach you and your child how to do myofascial release massage. The massage should be firm, in a downwards direction on the quads, from the top of the thigh to the top of the knee.

You should do this for two minutes every morning. Doing the massage in the mornings will help loosen the muscle and decrease any additional pull on the quadriceps insertion over the rest of the day.

We will also teach you and your child some conventional quad stretches if this is appropriate.

With future growth spurts the pain may return, so keep up with the stretches and continue to follow the advice.

Contact us

If you have any questions or worries, please contact us:

Paediatric orthopaedic therapy team
Telephone: **023 8120 4659**

Useful links

www.nhs.uk
www.uhs.nhs.uk/childrenshospital

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