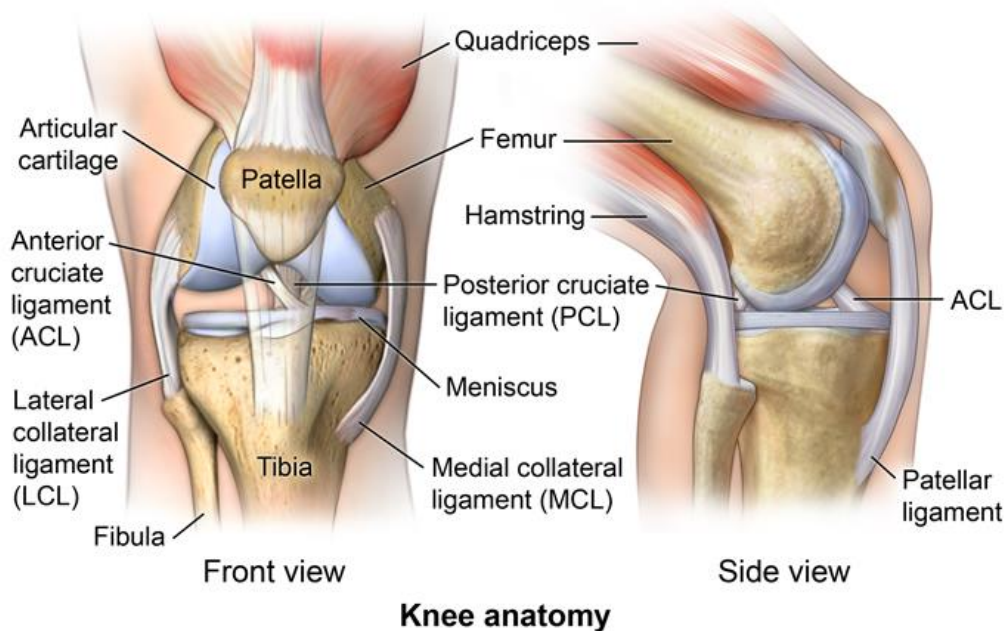


INFORMATION FOR PATIENTS, PARENTS, GUARDIANS AND CARERS

## Osgood Schlatter's disease

This leaflet aims to provide you with information regarding Osgood Schlatter's disease in children and adolescents (a common knee complaint where pain is felt in or around the knee), including its common causes and treatments.

The knee is a complex joint formed of the lower part of the femur (large thigh bone), the upper part of the shin bone (tibia) the small fibula bone (on the outside of the shin bone) and the kneecap (patella). Various muscles, tendons and ligaments stabilise the knee and help it function, usually without any problems.



Osgood Schlatter's disease is a term that describes pain experiences by people just below the knee. It is very common in young people who are active and going through a growth spurt. It causes pain just below the knee on the shin bone and it can also come with some swelling and a prominent bony area on the front of the knee.

### Causes of Osgood Schlatter's disease

The muscles on the front of the thigh (quadriceps) and the patella tendon help to control the movement of the knee when straightening the knee. The patella tendon attaches into the front of the shin bone onto an area called the tibial tuberosity.

Repeated stress and strain around the area where the patella tendon attaches can cause inflammation, pain and sometimes a bony bump may develop in the area.

Periods of growth can act like a trauma which can cause the muscles and tendons to be over stretched, causing more irritation at the point where the patella tendon inserts. Bones grow significantly quicker than your muscles, and this can result in an imbalance and irritation.

The diagnosis of Osgood Schlatter's disease is usually made from clinical assessment of your symptoms. You do not usually need any scans.

### **What are the signs and symptoms?**

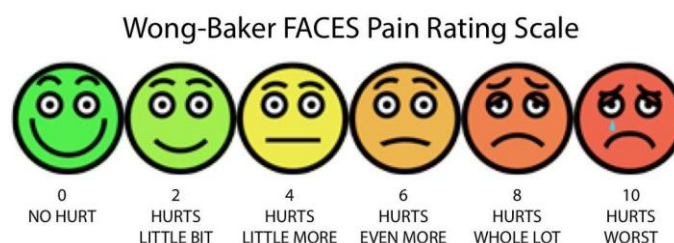
These symptoms often occur around the ages of puberty (10-14 years old), particularly when you have a growth spurt. Usually just one knee is affected but sometimes it can affect both:

- Pain and swelling around the bony part of your shin bone below the knee.
- A bony lump below the knee that can be sore if touched or when kneeling.
- Pain at the bottom of your knee during or after sports and activities.

### **What can you do to help yourself?**

It will usually be recommended that you have a period of rest initially to allow the symptoms to settle. You may have to also change the activities that you do or how much you do.

You can still continue your sports or activities but you should aim not to go into pain. When you are playing sport, if 1/10 is very little pain and 10/10 is horrendous pain, then you want to aim to not go beyond 5/10 pain. If you tend to only realize the pain after the activity, then you should slowly increase the amount of time that you are doing the sport and monitor your pain afterwards. For example, if your pain after activity is more than 5/10 then you may have done too much, but if it is less than 5/10 then you can slowly increase the amount of time you do the activity. It is common that you may find training sessions easier than playing games.



Osgood Schlatter's disease in children and adolescents is extremely treatable with physiotherapy. You may find initially that the stretches and strengthening exercises provided will cause you discomfort, but the more regularly you can carry these out, the better you will feel.

Your exercises will need to become part of your daily routine to see the benefits and will need to be carried out long term, especially throughout periods of growth. Your physiotherapist will provide you with an individual exercise programme after an assessment.

As these exercises get easier, your physiotherapist will change and adapt these to make them more challenging. This will gradually improve the strength and balance between the muscles around your knee.

When you start the new exercise programme, you will feel discomfort again until your body has had time to adapt. This cycle will continue until you have achieved your goals. In general, Level 1 exercises consist of seated and lying exercises, such as straight leg raise and bridging, along with hamstring and calf stretches. Level 2 will progress to include some weight bearing exercises such as squats and Level 3 will progress to dynamic exercises looking at return to sport/hobbies.

When you have an injury or a new period of growth, the knee pain may return. When this happens, some useful advice to follow is PEACE & LOVE. Following a growth spurt, which has led to your knee becoming painful again, it is important to return to your initial Level 1 physiotherapy exercises. If you keep working on the higher level exercises, this will continue to aggravate your symptoms. Once your knee pain has settled, you can gradually work back through the levels of exercises provided by your physiotherapist.

- P**  **PROTECTION**  
Avoid activities and movements that increase pain during the first few days after injury.
- E**  **ELEVATION**  
Elevate the injured limb higher than the heart as often as possible.
- A**  **AVOID ANTI-INFLAMMATORIES**  
Avoid taking anti-inflammatory medications as they reduce tissue healing. Avoid icing.
- C**  **COMPRESSION**  
Use elastic bandage or taping to reduce swelling.
- E**  **EDUCATION**  
Your body knows best. Avoid unnecessary passive treatments and medical investigations and let nature play its role.
- &**
- L**  **LOAD**  
Let pain guide your gradual return to normal activities. Your body will tell you when it's safe to increase load.
- O**  **OPTIMISM**  
Condition your brain for optimal recovery by being confident and positive.
- V**  **VASCULARISATION**  
Choose pain-free cardiovascular activities to increase blood flow to repairing tissues.
- E**  **EXERCISE**  
Restore mobility, strength and proprioception by adopting an active approach to recovery.



**Physiotherapy is necessary treatment for Osgood Schlatter's disease in children and adolescents.**

**If your symptoms significantly worsen, and you are unable to manage them, your parent/guardian/carer will need to contact your GP or physiotherapist for advice.**

### **Contact details**

Therapy Services Department  
Clinic 10  
King's Mill Hospital  
Mansfield Road  
Sutton in Ashfield  
Notts  
NG17 4JL

Telephone: 01623 672384, or 01623 622515, extension 4157, or 07787273070.

### **Further sources of information**

NHS Choices: [www.nhs.uk/conditions](http://www.nhs.uk/conditions)

Our website: [www.sfh-tr.nhs.uk](http://www.sfh-tr.nhs.uk)

### **Patient Experience Team (PET)**

PET is available to help with any of your compliments, concerns or complaints, and will ensure a prompt and efficient service.

King's Mill Hospital: 01623 672222

Newark Hospital: 01636 685692

Email: [sfh-tr.PET@nhs.net](mailto:sfh-tr.PET@nhs.net)

If you need this information in a different language or format, please contact the PET (as above).

This document is intended for information purposes only and should not replace advice that your relevant health professional would give you.

External websites may be referred to in specific cases. Any external websites are provided for your information and convenience. We cannot accept responsibility for the information found on them.

If you require a full list of references for this leaflet, please email [sfh-tr.patientinformation@nhs.net](mailto:sfh-tr.patientinformation@nhs.net) or telephone 01623 622515, extension 6927.

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