

Patella pain in children and adolescents

Disclaimer: This fact sheet is for education purposes only. Please consult with your doctor or other health professional to make sure this information is right for your child.

What is patella pain?

Many adolescents feel pain at or near the patella (kneecap).

How common is it?

Children of all ages often feel anterior knee pain. It is most common during periods of rapid growth (generally young adolescents), or with increased sports participation. It is more common in girls than in boys.

What is the cause?

There are many causes for the pain. Children can feel hip pain at the knee, this is called referred pain. This means the doctor must check the hips and the knees. The problem in most cases is a mechanical one, with the bones and tendons in front of the knee being subject to increased stress. This happens because the muscles don't grow as fast as the bones do. The muscles are trying to stretch to catch up to the bones. This can increase the tension used to straighten the knee. Some children feel the pain or stress at the patella (kneecap), others feel it just below in the tendon connecting the patella to the tibia (shinbone). Others feel it at the connection itself called the tibial tuberosity.

What problems will occur?

There may be a little swelling. The pain does not cause any structural damage. It is safe for the child to continue playing sport and put up with the discomfort. The pain usually disappears completely when the child stops growing, or becomes a little less active.

What treatment will be required?

Despite the concern it causes the patient and the family, most cases get better with physiotherapy. A stretching and exercise program can reduce the pain. It is very important that the exercises to rebuild the quadriceps muscles are not painful. Squatting and stair climbing can cause pain in a moderately severe case, and should be avoided. Simple quadriceps contractions or straight leg raises are best early in the rehabilitation phase. Sometimes an elastic knee guard gives some relief of the symptoms. The physiotherapist may also choose to tape the knee.

Will surgery be necessary?

In very rare circumstances, usually after the child has finished growing.

Remember

- **The vast majority of children with patella pain will improve with a physiotherapy and home exercise program. Sports participation can be maintained with these exercises.**



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