



## Anterior knee pain

Knee pain in children and adolescents is widespread and can have very different causes. In many cases, an actual accident or a triggering event cannot be found. The complaints develop slowly and are suddenly experienced as daily symptoms.

Anterior knee pain is usually benign and has an excellent long-term prognosis. Nevertheless, the discomfort may limit daily life or sports. If restrictions are not tolerable, further evaluation and sometimes therapy are necessary.

### Which complaints and findings are typical?

- Typically pain occur during or after physical exertion
- Pain around the kneecap, especially on the inner side
- Rarely swellings
- The intensity can vary from very mild to severe, sometimes even bilateral. Pain, which can lead to limping and inability to play sports
- Pain in the upper or lower leg, as well as rest, or night pain, and fever, are absent
- Rarely, there may be accompanying mild instability or an entrapment.

### What causes this pain?

- In most cases, these symptoms are harmless and have no long-term consequences.
- Complaints can have many causes
- Overloading of the musculature of the upper or lower leg (see also M. Osgood-Schlatter)
- irritation of the mucous membrane of the knee joint
- Lesions of structures in the knee joint (meniscus, ligament structures, cartilage)
- Pain transmitted from another joint, e.g., hip
- Infections
- Rheumatic diseases
- Bone diseases
- Legs grow several centimeters per year during childhood so that slower-growing muscles become too weak and too short (relative muscle insufficiency and shortening)
- High sports activity, especially "stop and go" sports (soccer, tennis, floorball, basketball, etc.), in which high muscle forces are generated

### Which clarification is necessary?

- Many possible pathologies can be confirmed or ruled out with questioning and detailed physical examination.
- An X-ray, possibly also an MRI examination, can be helpful to detect changes in the bone and soft tissues.
- In some instances (swellings, several joints affected, etc.), it is essential to check blood values
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### What can be done?

- Since the causes of anterior knee pain are manifold, no general treatment recommendation can be given. Depending on the diagnosis, a conservative (without surgery) or a surgical approach can be helpful.
- If no significant pathology is found, the following will help in most cases: Reduction of load, abstinence from sports, usually for at least four weeks.
- Physiotherapeutic care, including instruction and monitoring of a home program
- muscle stretching
- Fascia mobilization see exercise section
- Medications: we prescribe anti-inflammatory medication rarely and only for severe pain, usually only for a few days.
- After the pain has subsided, a careful, gradual return to sports is advisable.
- In case of very long-lasting pain, which has not responded to these measures, the cause of the pain should be re-evaluated.

### When do I have to see the doctor again?

- No improvement despite 3-4 weeks of therapy and reduction of physical stress. (However, it takes at least three months for the symptoms to subside completely).
- Change of the pain character, for example, the new occurrence of pain at rest or during the night
- Rapid swelling, redness, and overheating around the knee joint.