Guide

Patellofemoral pain syndrome

Information brochure with exercises to accompany therapy

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Patellofemoral pain syndrome (PFPS) – the facts

The knee has a highly complex structure and knee problems can therefore have a number of different causes. Patello-femoral pain syndrome is the name given to pain around the kneecap joint (patellofemoral joint) – this pain is either behind, next to or beneath the kneecap. It is therefore commonly referred to as “anterior knee pain”.

These patients are predominantly affected

Patellofemoral pain syndrome is most prevalent among young women. This is because when the body is still developing the muscle and bones very frequently do not grow at the same rate. Moreover, the increased prevalence of misalignment (e.g. knock knees), hormonal aspects and a reduction in physical activity also play a role.

A basic distinction is made between three degrees of instability:

- Lateralisation of the patella
  (the kneecap glides along the side of the patellar groove)
- Subluxation of the patella
  (the kneecap almost dislocates)
- Dislocation of the patella
  (the kneecap dislocates completely)

Treatment: What helps with anterior knee pain?

Most cases of lateralisation or subluxation of the kneecap are treated conservatively, i.e. without an operation. The patient wears a knee support or a knee orthosis (for dislocation) to stabilise the kneecap and the knee joint. If the kneecap dislocates once or even several times, an operation may be considered. It is also important to correct the direction of pull on the kneecap.

Therapy-supporting exercises that help to recover from Patellofemoral pain syndrome

With targeted exercises, you can alleviate symptoms of patellofemoral pain syndrome and improve the mobility of your knee.

Other risk factors that favour the Patellofemoral pain syndrome

From the anatomical point of view, these include anomalies of the patella groove or the shape of the patella. Other risk factors include a lax ligamentous apparatus (hypermobility of the kneecap), a high patella and an disbalance between the inner and the outer muscles over the front of the thigh. The latter condition can lead to a situation, in which the shortened muscles pull the kneecap to the side over the tendons. The result: instability of the kneecap.

Signs and symptoms that can cause an unstable kneecap

The pain is felt behind, next to or under the kneecap. Symptoms onset above all after long periods of sitting or resting the knee joint (start-up pain), but also in connection with sporting activities or when climbing stairs.

Trigger points: When pain radiates

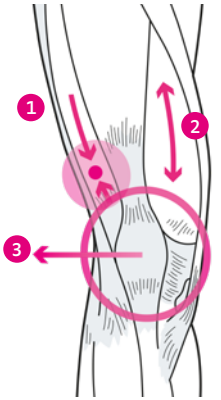
Healthy muscles contract and relax again. Overstrain can lead to the outer thigh muscle first contracting permanently and then shortening. This can result in the formation of „trigger points“ that cause local and radiating pain. Thus symptoms in the knee can also be associated with the formation of a trigger point in the outer muscles over the front of the thigh.

Causes –
what triggers PFPS

The most common causes include shortened or weakened thigh muscles, an incompletely formed kneecap groove, a leg axis deviation (such as knocked knees or bow legs) or even tilting of the kneecap.

In a healthy person, the kneecap sits in the so-called femoral groove like in a guide trough and it is also held in place by ligaments on each side.

The muscles actively support the patella in gliding along the centre of the groove. If the kneecap is unstable, it no longer runs exactly in the femoral groove and, in the worst case, it „jumps“ out of the guide trough. This is very painful.



Muscular imbalance in the thigh muscles

Tension in the outer section of the thigh musculature,
Formation of a so-called trigger point (painful hardening of muscle tissue) 1,
a weakened inner section of the thigh musculature 2

If the outer thigh muscle pulls on the kneecap with greater force than the inner muscle, the kneecap will no longer move in its optimal position

Shifting of the kneecap in an outward direction 3

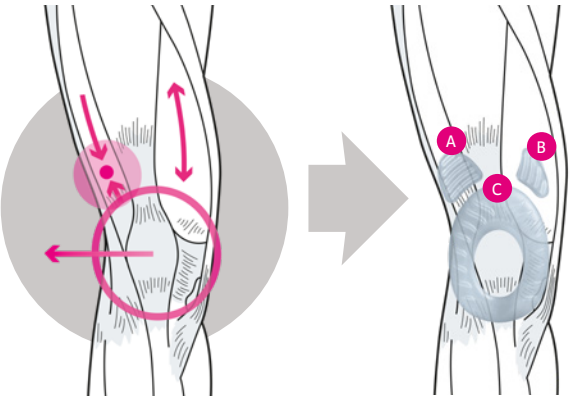
Patellofemoral pain syndrome

Therapy –
effective support

Therapy for patellofemoral pain syndrome is primarily carried out using conservative approaches, i.e. non-surgical methods.

Orthoses, such as the Genumedi PT, have proven to be effective. It can stabilise the knee joint and improve the guidance in the kneecap, and so counteract patellofemoral pain syndrome.

Starting point **Effective support**



Restoration of the muscular balance

A Pad for relaxing the trigger-point on the outer tigh muscle including a strap for adjusting individually pressure on the pad

B Pad for activation of the weakened muscle sections

C Secure guidance of the kneecap

Treating the causes + reducing pain

Product features

Grip-Ons:
additionally facilitate donning

Non-slip:
Secure hold due to integrated silicone dot coating

Strap system:
individually adjustable pressure on the pad

medi Comfort Zone:
with rippled structure for a higher level of comfort in the hollow of the knee

Open enclosure of the patellar ring:
for perceptible pressure relief on the kneecap

Three-part pad system:
Patella and thigh pads stabilise and provide secure guidance and relief with pinpoint accuracy

Intended purpose: Genumedi PT is a brace which guides patella tracking

Exercises to accompany therapy for Patellofemoral pain syndrome

You can alleviate your symptoms with special exercises. The training aims to reduce pain and improve the function of the knee. Please note that the severity of anterior knee pain is individual to each patient.

Discover our exercises that you can do in the comfort of your own home.

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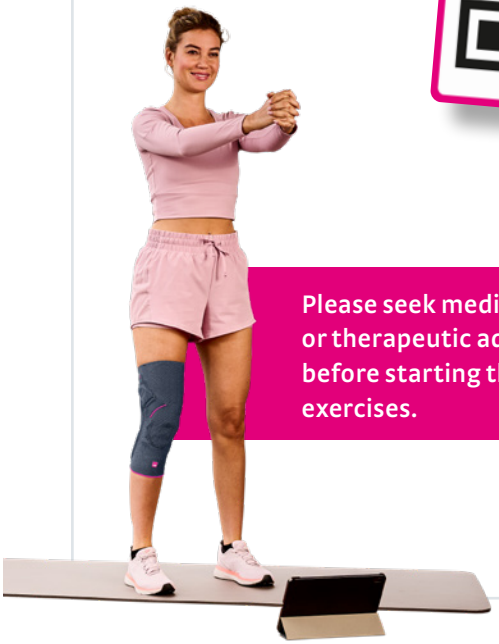

Please seek medical or therapeutic advice before starting the exercises.

More information

medi.biz/gen-pt-handling

Scan the QR code or use the URL for further information on how to use the product: medi.biz/gen-pt-handling

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