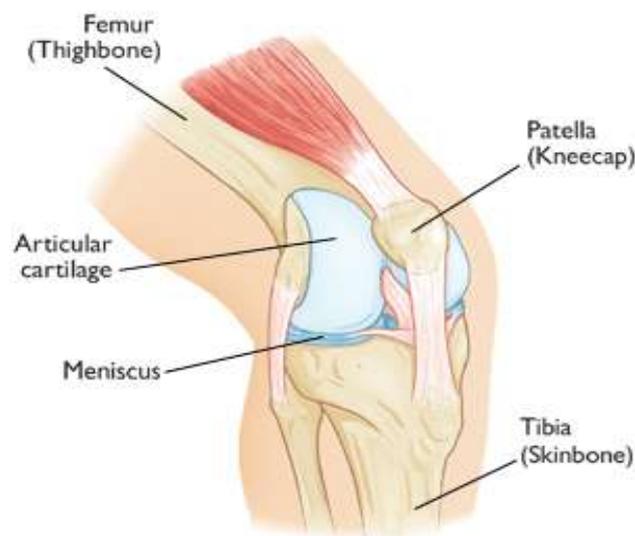


Anterior Knee Pain

What is Anterior Knee Pain?

Anterior knee pain is characterised by pain felt at the front of the knee over the knee cap (patella). It is more common in adolescents and healthy young adults, particularly girls; people who are overweight; and people who exercise often. Anterior knee pain can also be called Runners knee; Patello-femoral joint pain; Patella tendinopathy; Jumpers knee; Movie Goers knee.



The patella sits over the front of the knee joint. As you bend or straighten your knee, the underside of the patella glides within a groove over the bones that form the knee joint. There are strong tendons which attach the patella to the bones and muscles that surround the knee. Underneath the patella there is a layer of cartilage, this smooth, shiny surface ensures that the two bones glide over each other without rubbing.

What can cause anterior knee pain?

Patella maltracking

If you have tight muscles around the hip, knee or ankle this can cause the kneecap to move out of the groove resulting in pain, this is known as patella maltracking.

Chondromalacia patella

This is an irritation on the under surface of the patella, this can happen if the kneecap rubs against one side of the knee joint.

Patella tendonopathy (also known as Jumpers knee, runners' knee)

Occurs in patients who are very active – any repetitive sports, climbing stairs or hill walking for example. It is an overuse injury and pain is felt just below the patella.

What are the signs and symptoms of anterior knee pain?

Anterior knee pain is usually a dull ache, but you can experience occasional sharp pain or feel like the patella 'pops'. Sometimes the knee clicks or locks. The pain is most often felt

- Behind the patella
- Below the patella
- On the sides of the patella

These symptoms can worsen with

- Bent knee activities
- Walking down stairs / hills
- Standing up after sitting for a long time
- Running

What are the treatment options for anterior knee pain?

R.I.C.E (If you have recently hurt your knee)

Rest – Avoid putting weight on the painful knee

Ice – Apply a cold pack (or bag of frozen peas) for 15 - 20 minutes, several times a day

Compression – Use an elastic bandage that fits snugly around your knee without causing pain

Elevation – Keep your knee raised above the height of your heart for regular periods during the day

Modification

This is a very important aspect of reducing your knee pain. You should try to reduce or modify movements and activities that worsen your symptoms whilst things settle down. Resting from activities that bring on pain can help to reduce pain levels and promote the healing process, but the aim is to gradually increase function as soon as possible.

Pain medication

Simple medications such as Paracetamol can reduce pain effectively. Anti-inflammatories are also used to control pain and swelling, see your GP if you need advice.

Physiotherapy

Physiotherapy has been shown to be helpful in the treatment of anterior knee pain. However, anterior knee pain can be hard to treat and you will need to be patient to see results, it can take several months for symptoms to improve. The idea of completing these exercises is to improve the strength and stability of the whole lower leg and core support as well as improving flexibility. Overall the outlook is positive, with most people returning to the activity they enjoy.

The 6 simple exercises described below are a good starting point for treating anterior knee pain. If you find that any of the exercises make your knee pain worse seek guidance from your GP or a physiotherapist.

BRIDGING – Lie on the floor with your knees bent to about 90 degrees, your feet should be spaced equally to your shoulders. Slowly tighten your bottom muscles and lift hips off the floor. Hold this position for a few seconds then lower back down. Repeat 10 – 15 times.

<http://www.youtube.com/watch?v=TNIAiAJwqgA>



CLAM (HIP ABDUCTION)– Lie on your side with affected leg on top. Bend your knees to about 90 degrees; make sure your shoulders, hips and feet are all in line. Keeping your feet together, lift your top knee up making sure your hips do not roll back. Hold for a few seconds then lower back. Repeat at least 10 – 15 times.

<http://www.youtube.com/watch?v=QJ9Rmst88iE>



Stretches

Calf stretches – Stand about an arms length away from a wall. Stand with one foot in front of the other and toes pointing forwards (the affected leg at the back). Bend your front knee and you should feel a stretch in the back leg in the calf (keep both heels on the floor), hold for 20 – 30 seconds and repeat 3 times.

http://www.youtube.com/watch?v=1-TNX177_RU



Soleus stretches – In the same position as above, but this time bend both knees – you should feel the stretch lower in the calf, hold for 20 – 30 seconds and repeat 3 times. <http://www.youtube.com/watch?v=PQcn2L3rtBM>



Patella mobilisations – Sit down with your back supported and your legs out straight in front of you. Relax your thigh muscles. Hold your patella and move it side to side within your pain limits. <http://www.youtube.com/watch?v=j6EtNFOjJdY>



Wall Squats – Standing against a wall, feet pointing forwards and place a ball between your knees. Bend your knees to a comfortable level whilst gently squeezing the ball between your knees. Make sure your knees follow the line of your toes. Hold this position for a few seconds then straighten your knees to return to standing. Repeat this 10 – 15 times.

<http://www.youtube.com/watch?v=0NO8zKSdoS4>



NB If you find that any of the exercises make your knee pain worse seek guidance from your GP or a physiotherapist. There are other exercises available for anterior knee pain but they can often exacerbate symptoms if performed incorrectly. Therefore it is safer to show you these harder exercises with direct supervision during your physiotherapy sessions.

**This leaflet is available in larger print and other formats
please contact physiotherapy department on the address
below.**

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