Knee pain, what can I do?

AALBORG UNIVERSITETSHOSPITAL
Introduction
When you were at the meeting with the physiotherapist, you received an explanation regarding your knee pain as well as advice and guidance about what you can do about your pain. This pamphlet is a summary of that advice and guidance, so that you have a place you can refer to, if you forget the advice and guidance.

Why does your knee hurt?
The causes of patellofemoral pain syndrome (PFP) are not yet completely established. Many researchers believe that one of the main causes of the pain is a dysfunction of the joint between the kneecap and the thighbone. This dysfunction makes the kneecap move towards the outside of the thigh, which can give an increase in friction and pressure in the joint, because the kneecap and thighbone are not moving optimally with each other in this position. You could say that there has been a reduction in kneecap tracking. Normally kneecap tracking is controlled by the cooperation between joint structure, ligaments, muscles and a person’s ability to activate their muscles. The reason for knee pain can come from all of these structures, because they all have to cooperate in order to achieve proper knee function.

The pictures show how the kneecap moves in the groove at the front of the lower part of the thighbone, which in the picture is called “femur”. The kneecap is embedded in the tendon from the large thigh muscle.
Learn to move better
The physiotherapist showed you, how you should move during walking and taking the stairs. As you were told, you need to be aware of the positioning of your knee. It is important that your hip, your kneecap and your 2nd and 3rd toe are kept in line with each other. The reason for this is that by doing so, you ensure that your knee joint functions in the best possible way, and the forces that affect your joint are as minimal as possible.
You can see pictures below of different situations from your day-to-day life. The first picture on the left shows the correct way to use your knee and the second picture on the right shows the incorrect way.

Standing
It is important when you stand that you put an equal amount of weight on both legs, that your knees are slightly bent and that your hips are in line with your kneecaps and 2nd and 3rd toe so that you are not “hanging” at your hip.
From sitting to standing
When you stand up, you should have an equal amount of weight on both legs, and ensure that the front of your hips are in line with your kneecaps down to your 2nd and 3rd toe. Make sure that your knees do not meet in the middle so that they touch each other. Ensure that your toes are pointing straight ahead.

Stair Walking
You should make sure that your toes on the weight bearing leg are pointing straight ahead when you are walking up and down the stairs. At the same time, make sure that the hip, which is supporting your standing weight, does not drop down to the side. Ensure that your knee is in line with your 2nd and 3rd toe so that it is not turning inwards.
Bicycling
It is important when you are cycling that you use each leg equally. If it is painful for you to cycle, then you should reduce the load on the exercise bike, or change down a gear if you are cycling outside. Make sure that your knees do not meet each other in front of your body.

How should you deal with the pain and how should you reduce physical activity if necessary?
When you experience pain in your knee, it is most likely during movement. Most people will therefore stop the activity, which is causing the pain. It is important that you listen to your body and take consideration for the pain, but do not stop altogether. If for example, it is painful when you run, then you could try to alternate between running and walking. Then you can try to see if it also hurts when you alternate between running and walking. Another example could be that you experience pain when you walk long distances. In this instance, you could try to reduce the distance you are walking, and instead cycle part of the way. It is always better to cycle than to take the bus. The point is that you may do all the activities that do not cause you pain above 5/10 during the activity, and that your pain does not become worse the next day. It is however okay to be sore in your muscles.
**Hvordan kan du roligt vende tilbage til sport**

If you have stopped doing sports and want to return to sports, it is important that you start up again slowly. If you normally practice sport for one hour at a time, then you can start by taking part in the warm up, or e.g. for the first 15 minutes. The next day, you can evaluate how you feel. If your pain is not any worse, then you can safely take part in practice next time for 30 minutes. After that, increase the amount by 15 minutes a week as long as you continue not to have pain the next day. When you can take part in the whole practice session for two weeks in a row, then you can begin to play matches again.

The figure below demonstrates how you must slowly increase the amount of time you are training in order to return to your sport. You can see how you become healthy and increasingly better, when you increase the workload gradually. Underneath, you can see what happens if you try to go too fast. In this instance, you increase your training too quickly over a short period of time, resulting in you having to stop with the activity because your body was not ready for such a large workload.
At the end of the information session, you had the opportunity to ask the physiotherapist some questions. You can write the answers to your questions below.