





Osteoarthritis of the knee

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Introduction

Osteoarthritis is a degenerative condition of the joints. Generally speaking, it occurs as a consequence of joint wear and tear. Knee osteoarthritis can cause no symptoms, alternatively it can cause pain, swelling and locking of the knee.

It is important to note that knee arthritis does not always get worse. Progression of symptoms is more likely if you;

- are overweight,
- smoke,
- have had a knee injury causing permanent damage to the supporting structures of the knee



General osteoarthritis advice

When starting an exercise for the first time it is important to 'start low and go slow'. This means start with gentle exercises concentrating on the movement and slowly progress through weight bearing to resistance exercises.

It is important to note that exercise in arthritis is completely safe and will not make you arthritis worse.

Pain killers can be used to help you do the exercises. Talk to your doctor for more specific advice regarding pain killers.

However, there are many other options which can improve your pain. Consider appropriate footwear, and in particular weight loss (if you are overweight).

To find out if your weight is contributing to your arthritis check your BMI here (https://www.nhs.uk/live-well/healthy-weight/bmi-calculator/).

If your BMI is raised, decreasing this will improve your symptoms. If you want advice on how to reduce your BMI, use the following link (https://www.nhs.uk/live-well/healthy-weight/start-the-nhs-weight-loss-plan/).

For more information on physical activity guidelines use the following link (https://www.nhs.uk/live-well/exercise/).

Causes of knee osteoarthritis

Several factors normally combine to cause symptoms of osteoarthritis:

- Previous joint damage (from trauma or other conditions such as such as gout and rheumatoid arthritis)
- Increased bodyweight
- Reduced physical activity

Symptoms of knee osteoarthritis

The main symptoms of osteoarthritis are;

- Pain
- Stiffness
- Swelling

Pain can be felt anywhere around the knee, or in one place such as the front or the sides. Your pain may get worse after certain activities, such as going up or down stairs. Knee pain is often worse after activity and at the end of the day. Sometimes you may feel your knee creak or crunch as you move it; this is nothing to worry about. The knee joint often feels stiff in the morning, this should settle within 30 minutes.

Diagnosis of knee osteoarthritis

A diagnosis of knee arthritis can be made during a physical examination. An X-ray maybe requested to look for osteoarthritis in the knee. However, it is important to note that the severity of arthritis on an X-ray does not correlate well with the severity of symptoms.

Self management of knee osteoarthritis

Footwear

Poor ankle support is a common cause of knee pain. Therefore, ensuring you wear well maintained footwear that supports the ankle is important in the management of knee pain. Some people will find orthotics beneficial, speak to your healthcare team to arrange this.

Weight loss

If you are overweight you are putting extra load through your knee. This will be contributing to your arthritis. Therefore, losing weight will improve your symptoms.

Warm and Cold Compresses

Warm compresses can be useful for your day to day pain, whereas cold compresses are useful to manage swelling and pain as a result of that swelling.

Walking Aids (e.g. Nordic walking poles)

Using walking aids in in both hands can significantly reduce the load through your knees, therefore allowing you to keep mobile for longer.

Painkillers

Various over the counter pain killers are available for the management of pain. It is important to note these will not cure the arthritis, only numb the pain. It is therefore important to continue with all other aspects of treatment. If you have any questions your local pharmacy will be able to advise about what is safe.

Exercises for knee osteoarthritis

Exercise 1: Seated Knee Extension



- Sit upright with your thighs supported on a chair.
- Bend your target knee as far back as possible.
- Straighten your target knee as far as possible and hold for a few seconds, then relax and lower.
- Don't lift your thighs off the chair.

Exercise 2: Heel Slides



- Lie on your back with your knees bent.
- Slide one heel out to straighten your knee.
- Hold in this position, feeling a gentle stretch in the back of your thigh, then return to the starting position.

Exercise 3: Inner Range Quads in Supine









- Place a rolled up towel or other object under your knee.
- Slowly straighten your knee as your raise your foot.
- Keep your knee on the towel at all times.
- Lower back down and repeat.

Exercise 4: Step Up





- Slowly step up and down on a step.
- Lead with your affected leg both ways.

Exercise 5: Chair Squat





- Stand in front of chair of an appropriate height (a lower chair increases the difficulty and a higher chair is less difficult).
- With your feet about shoulder width apart, sit with your hips back as if to sit into a chair whilst raising your arms front of you.
- Touch the chair with your bottom and then return to standing whilst lowering your arms.

What next?

If you are still suffering with symptoms then visit you healthcare professional. There are other options available for knee arthritis such as injections and even surgery. However, these options are invasive and come with risks. Therefore, are often left as a last resort. Steroid injections into the knee can help with persistent symptoms. It is important to note that knee washout procedures are no longer performed due to lack of evidence.