

OSTEOARTHRITIS OF THE KNEE

Knee pain affects nearly 50% of people over the age of 50, and in 25% of those people it becomes a long-term problem although it can occur at any time of life. The pain caused by osteoarthritis of the knee can significantly reduce your quality of life, your experiences with your family and impact on your daily activities.

Unlike some forms of arthritis which result in inflamed, swollen, hot, painful joints, osteoarthritis (OA) is different. OA is a degenerative arthritis, where the cartilage in your joints, or in this case the cartilage in the knee, starts to break down.

You may experience some or all of the following symptoms:

- Pain
- Stiffness
- Creaking, crunching, grinding sensation in the knee
- Swelling (caused by extra fluid in the joint)
- Your knee giving way
- Your knee not moving as freely or as far as normal.

You'll probably find that your pain waxes and wanes throughout the day, sometimes depending on how active you've been but sometimes for no clear reason. Often people find that changes in the weather, especially cold weather, make the pain and stiffness worse. The good news is, there are lots of things you can do to improve the situation.

HOW DO I FIND OUT IF I HAVE OA OF THE KNEE?

The first step is to see a medical practitioner. This could be your GP or a physical therapist who will assess your knee and take a history of your symptoms. The best investigation is an X-ray as this will show degeneration in the joint however this may not be necessary. It's good to note that the extent of the 'damage' seen on the x-ray, doesn't necessarily correlate to the amount of pain you feel. You may have severe pain with only a small degree of joint degeneration or vice versa.

SO WHAT HAS HAPPENED TO MY KNEE JOINT?

Your knee joint is where your thigh bone (femur) and your shin bone (tibia) meet. The muscles around the joint along with the small patella bone that sits between them, allow movement between the upper part of your leg and the lower part. The surfaces of the joints are coated in cartilage which is a hard, smooth tissue that allows the bones to glide smoothly over each other. Cartilage is also a built-in shock absorber. The joint and the cartilage is encased by a capsule which contains fluid to lubricate the joint. The bones are held together by ligaments and the joint is strengthened by the capsule which is made of a tough, fibrous material.

All healthy joints and joint tissues are constantly going through a cycle of repair as part of normal life, however in osteoarthritis this repair process becomes faulty.

It can occur for lots of reasons, but when this happens:

- The cartilage becomes rough and thin
- The bone underneath the cartilage reacts by growing thicker

- The bone at the edge of your joint grows outwards, forming bony spurs called osteophytes
- Extra fluid may be produced causing swelling
- The capsule and ligaments around the joint slowly thicken and contract making the joint stiff.

WHAT CAN I DO ABOUT IT?

It is reassuring to note that OA is not progressive, as in it doesn't have to get progressively worse. It is possible to manage it and find a happy equilibrium between 'exertion and exacerbation'. Your therapist will tell you it's very important to keep your joints moving. You need to find the right balance between rest and exercise – little and often is usually the best approach.

Exercises are aimed at maintaining and improving the range of movement of your knee, as well as strengthening the surrounding muscles. The stronger the surrounding muscles, the better support your knee will have during movement. A therapist can also help make sure you're moving in a way that doesn't make the condition any worse, which often happens as a result of pain.

They may also use massage therapy, especially during times of a 'flare-up' to reduce pain. Manual techniques help loosen the joint and surrounding tissues. Swimming or hydrotherapy, cycling, elliptical trainer and gentle walking are all good exercise with reduced impact on your knee. Losing even a small amount of weight through exercise or diet, can make a big difference to the strain on your joints.

DAY-TO-DAY TIPS:

- Pace your activities through the day – don't tackle all the physical jobs at once.
- Wear low-heeled shoes with soft, thick soles (trainers are ideal). Thicker soles will act as shock absorbers.
- Use a walking stick to reduce the weight and stress on your painful knee.
- Use the handrail for support when climbing stairs.
- Don't keep your knee still in a bent position for too long, it will stiffen up.
- Think about modifying your home, car or workplace to reduce unnecessary strain on your knee.
- Learn to relax your muscles and let the tension out of your body.
- Use heat/ice packs to help ease pain and stiffness.
- Knee braces for osteoarthritis are available.
- Speak to your doctor or therapist first for recommendations or referrals for any of the above.

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