The management of knee osteoarthritis

What is osteoarthritis?

Osteoarthritis (OA) is a common condition which leads to painful joints, difficulty in moving and reduced ability to do day-to-day activities. It occurs when the lining surface (cartilage) of the knee bones gradually wears out and this causes pain and swelling.

OA is common and it is estimated that over 2 million Australians report having symptoms. OA is more common in females, people with previous injuries, people who are overweight, and with limb mal-alignment. The older you are the more likely you are to have symptoms of OA.

People with knee OA often have pain when walking, especially up and down stairs or on uneven ground. Getting in and out of cars or standing after sitting for a while can also be uncomfortable. On some occasions people complain of pain when resting and difficulty sleeping.

Treatment of knee osteoarthritis

The good news is that most people with knee OA can be treated without surgery. Joint replacement surgery is only needed for people who have significant pain and who have not responded to non-operative treatment. Listed below are some of the treatments that have good medical evidence that they work for the majority of patients.
Pain management

*Paracetamol:* You can take up to eight paracetamol tablets a day (six if you are using long-acting paracetamol).

*Non-steroidal anti-inflammatory agents (NSAIDs):* These can reduce the inflammation associated with painful knees. These do not need to be taken every day. Sometimes it is best to take before doing activities to prevent pain (i.e., before golf or going for a long walk).

It is better to try and reduce the onset of pain than to play catch up after the knee becomes sore. If the knee swells after activity, rest and an ice pack can be used. Stronger painkillers are rarely need for OA. Often a flare up of the arthritis will settle down after a few days.

Knee injections with steroids and local anaesthetic can be used for a flare up of symptoms. Injections of platelet rich plasma (PRP) and stem cell injections do not have good scientific evidence in helping patients with severe arthritis of the knees.

**Knee exercises**

An important part of managing your symptoms is strengthening the muscles around the knee joint. You can visit a physiotherapist for a supervised program. Hydrotherapy can also be helpful and many centres have water-based exercises for patients with OA; however, many might be closed at the moment.

The best outcomes for people with OA are to perform exercises three times a week if possible to do so. A simple exercise for strengthening the thigh muscles is to sit on a chair and straighten your leg and hold for five seconds (you can also attach a small weight to your ankle).

**Weight management**

Obesity is probably the most important risk factor for arthritis that a person can modify. Increasing weight is directly linked to developing knee OA and increases the mechanical load through the joint. A weight reduction of at least five per cent is recommended and can lead to an improvement in symptoms and slow the progression of the disease. Making an appointment with a dietician may be appropriate.
Braces

The use of knee braces for painful arthritis can work for some people, especially in colder weather.

Complementary/natural medicines

There are many natural medicines which are claimed to improve the symptoms of knee OA. However, when tested under proper medical conditions most of these are no better than a ‘placebo’ – you might think that they are working but they may not be. There may be no issue with you taking these but some can have side effects.

Platelet rich plasma (PRP) and stem cell injections do not have good scientific evidence in helping patients with severe arthritis of the hip and knees.

Surgery

Joint replacement surgery should only be undertaken when all other non-operative options have been tried and patients are willing to undergo an operation.

Useful information

The following website can give you more information if you wish:

https://www.myjointpain.org.au/

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