

## Osteoarthritis: how can physiotherapy help?

*Osteoarthritis (OA) or degenerative joint disease affects a large number of the population and can be well managed by maintenance physiotherapy and a prescribed exercise program.*



Research indicates that 90% of people will have some type of osteoarthritic changes occurring in their weight bearing joints by the time they are 40 years of age. While not all of these are symptomatic, osteoarthritic patients present regularly in large numbers to their doctors or health professionals with joint pain and inflammation.

These damaged joints can

be irritated at work, during sport or in a home related trauma. Different joints are affected depending on posture, injury, past history and a range of hereditary factors. The most commonly-affected joints are spinal and weight-bearing joints such as the hip and knee.

Medication is often prescribed including pain relief and non-steroidal anti-inflammatories (NSAIDs). Whilst these can assist with initial management they may have long term side effects. Patients often seek more natural options to manage their condition or to use in conjunction with medication. Generalised exercise programs given to these clients with insufficient education, instruction and warnings in place have the ability to increase pain and aggravate inflammation. It is therefore important that these clients see a trained physiotherapist who has knowledge and understanding of OA.

Intermittent flare-ups in arthritic joints are most common because the normal range and function of the joint are disrupted due to damage. This is tolerated until function is significantly affected. It is often at this point that patients will make an appointment to see their doctor or health professional.



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## Physio In Practice

Physiotherapy treatment provides conservative but effective results with even severely damaged arthritic joints. A thorough assessment is vital for treatment prescription.

A range of modalities include but are not limited to:

- joint mobilisation
- exercise prescription
- electrotherapy modalities
- acupuncture
- hydrotherapy
- supports/aids and education.

These modalities:

- aim to reduce pain
- improve range of movement and strengthen key muscle groups.

This will allow the patient to take control of his or her condition and to perform daily functions with less disruption. Specific exercise programs can assist with weight loss which may be vital to recovery by reducing the load that is placed on the joint. Once the pain is under control and function is regained it is essential that some type of maintenance program is initiated.

Intermittent treatment when the joint becomes acute and the patient is forced back to his or her health professional is not the answer to long-term management for OA.

A home exercise program if done regularly will assist in reducing additional osteoarthritic flare-ups. Unfortunately long term compliance with this management plan does not always occur. Many patients will discontinue exercising once pain has subsided and function semi-restored until the next flare-up of pain. This can create further joint damage and deterioration by the repetitive cycle of exercise and inactivity. A maintenance physiotherapy visit every 4-6 weeks is the most effective method of maintaining joint range and strength. It will also allow the physiotherapist to review, modify and reinforce the prescribed exercises. Research indicates that while maintenance is ongoing, the overall medical costs are reduced for the patient due to the control of acute flare-ups.

Maintenance physiotherapy treatment in the public health system is often not a feasible option due to long waiting lists. Private physiotherapy clinics can offer affordable options for maintenance. These chronic conditions are often classified within the chronic disease management Medicare programs. This becomes a viable and cost-effective option for the patient.

In summary, the research indicates that even severe OA can rehabilitate well with physiotherapy. It is generally advised that maintenance is the preferred long term option for optimum conservative rehabilitation and reduction of progressive long term damage.



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## Osteoarthritis



Although it is the most common form of arthritis, osteoarthritis (OA) is just one of around 100 types of arthritic conditions. OA occurs when cartilage within joints wears down over time, which is why it is sometimes known as degenerative arthritis or degenerative joint disease. The risk of developing OA increases with age, with most people experiencing some form of the condition by age 70.

OA can occur in any joint in the body but is most common in the knees, hips, hands, neck and back as they are typically subjected to the greatest stress during general daily activity. Any factor that increases load on the joints will also increase your risk of OA.

Some factors include:

- Performing heavy or repetitive work (the back, hands and shoulders are particularly at risk with this).
- Having poor sitting or standing posture (joints are put in awkward or unnatural positions which can lead to progressive joint overload).
- Excessive body weight. This places additional stress on the back, hips and knees.

Although OA cannot be cured, there are many treatments that can decrease the symptoms and improve your quality of life.

### Symptoms

Symptoms of OA include pain, joint stiffness, clicking sensations, cracking or grating, occasional swelling and joint deformity. In its early stages, pain and stiffness will often be worse in the morning, ease as the joint 'warms up' then deteriorate again with increased activity, or after periods of inactivity, such as sitting for long periods.

As the condition progresses and the joint degenerates, the cartilage may wear out completely causing bones to rub against each other with pain more prominent at rest. Bony spurs may also develop as the OA progresses, potentially causing increased pain and a sensation of the joint 'locking' when attempting to move in certain directions.



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### What can you do?

#### **Simple medications:**

- Regular paracetamol is an option to help reduce osteoarthritic pain in the short term. Use only as directed. Incorrect use can be harmful. Consult your health care practitioner if pain and symptoms persist.
- Topical non-steroidal anti-inflammatory drugs (NSAIDs) may also have some symptomatic benefit (speak with your GP about this). Use only as directed. Incorrect use can be harmful. Consult your health care practitioner if pain and symptoms persist.
- Natural therapies: Glucosamine is a sugar naturally produced by the body. It is believed these supplements may be useful in treating OA where there has been a breakdown of cartilage. It is thought that taking glucosamine and/or chondroitin may relieve the pain and prevent and slow down the cartilage breakdown associated with OA. Research on this has been inconclusive to date ([www.arthritisvic.org.au](http://www.arthritisvic.org.au)).

#### **Cold and heat:**

- Ice: Application of an ice pack to the affected area for 20 minutes can be beneficial during an acute flare-up in symptoms. This is important if there is any swelling and heat in the area.
- Heat: If the symptoms have not flared-up recently and the primary complaint is mild pain or joint stiffness application of a heat pack for 15-20 minutes at a time may be preferable.

#### **Modifying activities:**

Often the symptoms of OA worsen with prolonged activity. Simple modifications to the activities that are causing pain can help, without having to cease them all together.

#### **Lifestyle changes:**

One of the most important things you can do to reduce the symptoms of osteoarthritis is to manage your weight with regular exercise and a controlled diet.

### What can physiotherapy do?

A physiotherapist will conduct a series of clinical tests to diagnose the extent of your condition. In some cases, an X-ray may be taken to confirm the diagnosis. Once this thorough assessment has been completed, your physiotherapist will work with you to create a treatment plan and establish management goals.



Your treatment will typically include hands-on therapies such as massage, stretching and passive joint mobilisation to encourage full range of motion and to decrease muscle spasm/tightness. You will also be provided with a suitable exercise program designed to stretch and strengthen muscles surrounding the affected joints while minimising your pain. Your physiotherapist may also provide you with ideas for diet and weight management. He or she will also identify any other potential treatment modalities such as hydrotherapy, acupuncture and dry needling which may help.

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