# **Osteoarthritis**

Osteoarthritis, or sometimes called OA or arthritis is one form over 100 different types of arthritis. However, it is by far the most common cause of arthritis. Osteoarthritis literally translates to mean "bone and joint inflammation".

The condition is said to run in families. So if your parent or grandparent has osteoarthritis, you are more likely to suffer with it too.

OA should be considered as natural degeneration of the joint. This is completely normal. As we age, our body will degenerate. Our organs degenerate, our skin ages, and nerves and blood vessels age too, and also our joints show signs of wear. OA is often known as "wear and tear". The older we get, the more joints will show signs of degenerative changes.

Many joints in the body are susceptible to OA. The spine, the fingers and thumb, knees, hips and feet can all suffer with OA. Other joints affected but far less commonly is the jaw, pelvis and sacro-iliac joints, and rib joints. Sometimes just one joint is affected, but often multiple joints are affected just at different speeds. So it is not uncommon to first notice some hip stiffness on one side, only to be followed months or years later with similar symptoms on the other side.

Some OA sufferers tend to report having particularly active lifestyles, playing a lot of sport as a child, while others report having a poor diet, or being obese. Sometimes OA is secondary to a previous joint injury. One of the most common is suffering a meniscus tear in the knee, and then developing OA several years or even decades later. OA also commonly forms at the site of a fracture if the fracture was next to a joint.

OA is different to rheumatoid arthritis. With the latter, there is inflammation on the joint, but its more systemic and due to the blood attacking the joints. Fingers are typically badly affected, and multiple joints tend to suffer with pain at the same time. Again it often runs in families. OA should also not be confused with osteoporosis. Osteoporosis is bone thinning, and has nothing to do with OA. Osteoporosis tends to be painless, and is known as a silent disease, until you fracture a bone from a fall or injury. With OA, fracture is far less likely, and it tends to be more painful generally.

Having OA does not mean you will suffer with pain for the rest of your life. It simply means that the joint has become worn and is now getting inflamed. This inflammation can be treated and controlled with various therapies such as ice/heat, exercises, fitness (swimming, cycling are good), diet, and physical therapies.

## **Osteoarthritis Anatomy**

The skeletal system is made up of all the joints and bones in the body. Where two bones connect, it forms a joint. This joint is a moving part of the body, so helps us to twist, turn, bend, walk, run, climb, or get into a particular position. At the end of the bone is cartilage. This is a very hard outer layer that sits on the bone. It is smooth, and allows the bone to glide. If the cartilage degenerates or suffers injury, then the cartilage starts to become torn or worn. Once it wears, it can form small nodules or cysts that can be painful. After the cartilage has worn through, the joint space narrows, so the two bones are now sitting closer to each other. There may now be an issue with bone on bone, where the cartilage is no longer present to protect the end of the bone. Once this happens, the joint tends to undergo something called "hypertrophy" or thickening of the joint. The body lays down extra bone to try to protect the underlying bone, and to try to fuse the joint together (very late stage progression). If the joint does fuse, then often pain will be reduced. However, in most cases mobility should be sought to avoid the fusing process.



## **How to Treat Paget's Disease:**

## 1. Anti-Inflammatory Medications

For those who have mild pain, the only form of treatment needed is an anti-inflammatory medication. These medications can help to relieve inflammation and pain in the affected area. Doctors will often prescribe anti-inflammatories (NSAIDs) such as ibuprofen, but many therapists do not agree with its long term use. So if you do take medication, try to only use it when you really need it, and do not rely on it or use it every day if possible.

#### 2. Monitoring Through X-Ray

If you aren't having any symptoms from the disease, you might only require simple observation. Periodic x-rays will be ordered to monitor any changes that might occur. An MRI scan is a more advanced scan which shows more detail of the joint and cartilage and this can be useful diagnostically.

## 3. Physio

Physiotherapy, osteopathy and chiropractic can be very useful for increasing mobility in the joints, reducing stress on the lower limbs, and reducing muscle tightness. It can reduce inflammation and pain, and give considerable relief to the sufferer. Therapists will also prescribe exercises, and help the patient manage the condition.

## 4. Walking Stick

Whenever the leg or the pelvis is involved, a stick can help to decrease the pain effectively by minimizing the forces radiating through the bone. Walking sticks also help to prevent any falls, so there is a minimal risk of fracture occurring. In advanced cases, a walking frame might be necessary.

#### 5. Joint Replacement or Surgery

Joint replacement is very commonly done at the knee and hip. It is far less common at the shoulder which can be unsuccessful. Joint replacement is yet to be done in many joints in the body, with fusion being preferred. The surgeon will use screws or plates to fuse the joint together, to stop movement which in theory can reduce pain.

## Tips:

- For those who are overweight, losing a few kilos can go a long way in reducing the amount of pressure placed on the joints.
- Regularly performing gentle exercises such as swimming or cycling can help you to maintain flexibility and movement. Make sure you are going exercises that don't cause additional stress on the bone, so be careful of compressive exercise or heavy weight bearing.
- If you have family members with the condition, you are more likely to end up with it yourself.
- Eat a healthy and varied diet, preferably organic or as natural as possible.