

## Osteoarthritis

Osteoarthritis is a progressive degenerative process affecting our joints. It is most commonly seen in weight bearing joints and is particularly common in the knee. Initially the articular cartilage of the joint surface becomes softened and then cracks and wears away resulting in patches of exposed underlying bone. As this process progresses, the joint becomes swollen, painful and stiff. The edges of the joint develop spurs of bone and cartilage called osteophytes and the gap between the bone surface reduces. Ligaments may gradually weaken and rupture and the joint capsule becomes stiff and thickened.

As this process develops, symptoms of pain, stiffness, swelling and mechanical symptoms such as locking, catching and giving way develop. Initially symptoms often come and go and may well be activity related. The muscles around the knee often become weaker due to the pain and stiffness in the joint.

There are a number of problems that can lead to osteoarthritis such as previous injury to the knee and being overweight. Osteoarthritis often runs in families and people who are very bow legged or knock kneed are also at higher risk.

### Treatment of osteoarthritis

There are a number of treatment options for osteoarthritis starting with simple conservative measures and ending in knee replacement surgery. Initially lifestyle changes can be helpful such as losing weight and exercising to improve muscle strength around the knee. Over-the-counter medicines such as Glucosamine Sulphate and Chondrytin are helpful in some patients but there is some debate as to how effective they are. Simple pain killers (analgesics) such as Paracetamol and non-steroidal anti-inflammatories (NSAIDS) help control symptoms of pain and swelling.

Physiotherapy can be helpful in improving muscle strength and joint movement as well as addressing balance and walking.

There are a number of braces that can improve alignment of the knee to help offload arthritis compartments.

Surgical options include simple [arthroscopy](#) to treat mechanical symptoms from loose bodies, meniscal tears and joint surface damage through to realignment [osteotomy](#) to offload a worn part of the knee and [joint replacement](#).