



# BONES & JOINTS:

What you need to know

Bone and joint pains can affect anyone, regardless of age or gender and can come from a variety of sources, depending on the individual and the activities that they do. Certain age groups are more susceptible to certain conditions. Adolescents are likely to get injured because of their active nature and softer bones. For the middle aged to elderly, degenerative bone and joint conditions are more common. Bones lose their strength, either through wear and tear or through loss of nutrients that keep the bones healthy. Other diseases like gout and diabetic foot infections are also common causes. In elderly patients, poor eyesight, deteriorating muscle strength and coordination are common causes for injuries.



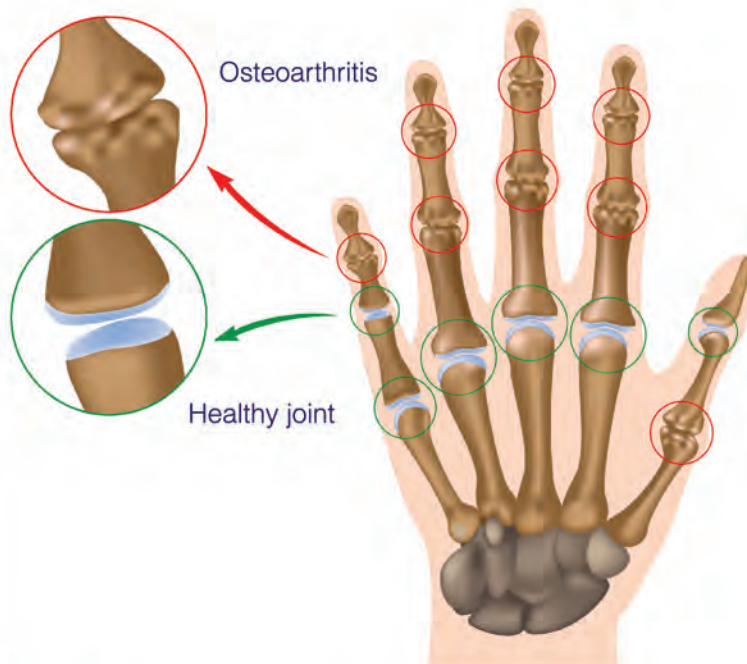
Arthritis is the inflammation of the joints, divided into two main groups, Osteoarthritis and Inflammatory Arthropathies, often known as Gout, but some other types do exist as well.



## Osteoarthritis

Where the cartilage between bone and joints is worn thin or damaged, movement in joints is hindered. Thus, tissue within the joint becomes irritated, causing pain and swelling. Symptoms can include pain, swelling and warmth. Women are more likely to suffer from osteoarthritis, especially after menopause, due to the stop in estrogen production.

**Treatment:** Medications, steroid injections and surgery. All these treatments are for pain relief and maintenance of functions in the affected limbs.



Gout



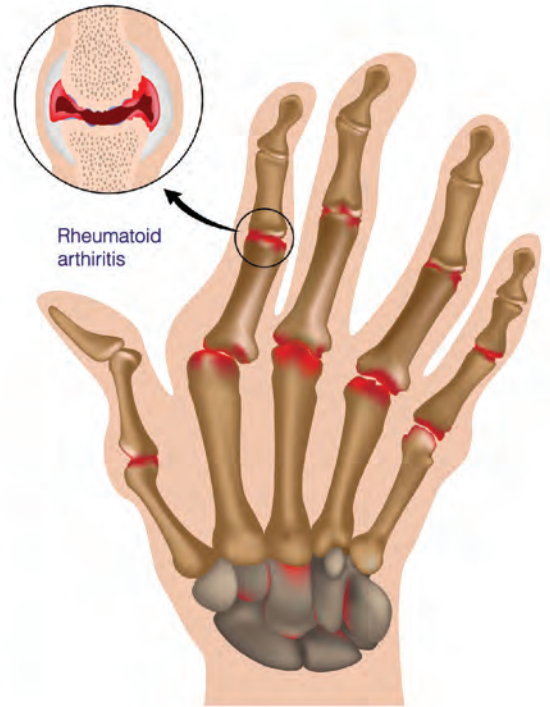
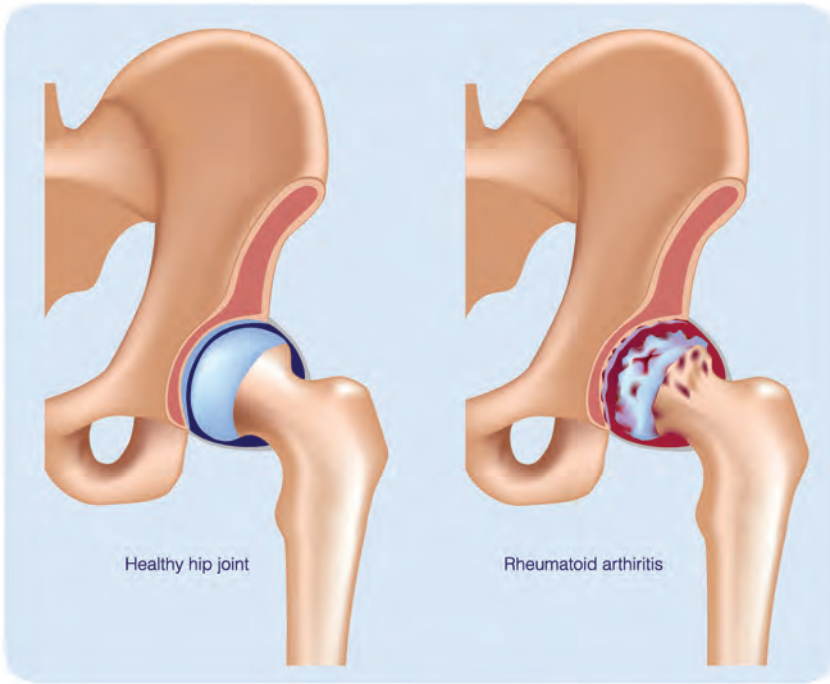
## Gout

Gout is a form of arthritis that causes redness, heat and swelling in joints. High levels of uric acid in the blood begin to form deposits in the joint. Usually, the body is able to secrete uric acid on its own. For people with gout, the uric acid levels in the blood are elevated. The excess uric acid can come from either increased consumption of foods rich in purines or decreased excretion of uric acid from the kidneys, due to renal failure.

Symptoms include swollen joints which have become red, tender and hot over the course of a few hours. The joint at the base of the big toe is affected the most often, but other joints can also be affected, including the knee, ankle, foot, hand and wrist joints.

Gout can be caused by excessive food intake, increasing uric acid production, excessive alcohol consumption, which interferes with the secretion of uric acid from the body, foods high in purine content, use of certain medicines, trauma, injury and genetics. Crash diets and uric acid lowering treatment may also cause gout.

**Treatment:** Non-steroidal anti-inflammatory drugs to relieve pain and other medications are used to control or reduce the blood uric acid levels to prevent future attacks.

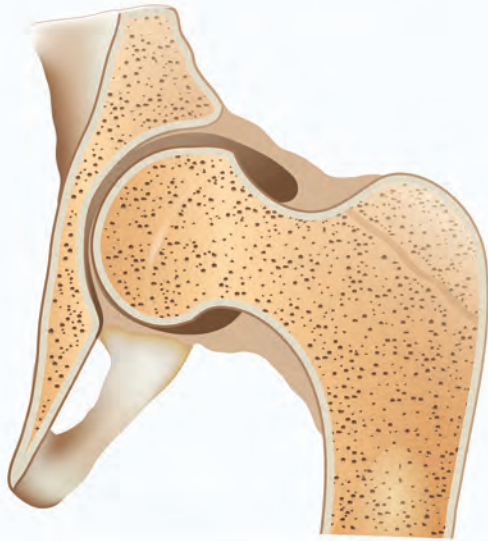


## R Rheumatoid Arthritis

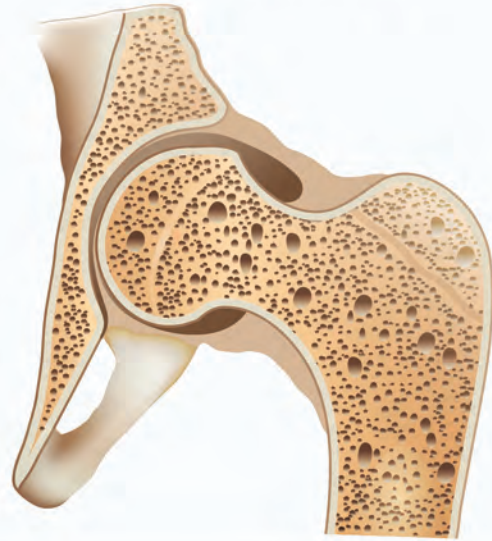
Joint stiffness, pain, swelling, similar to osteoarthritis, but there is also potential organ damage alongside its greater immobilising effect. It affects mostly females, beginning anywhere between 20 to 45 years of age. Rheumatoid Arthritis could be inheritable, while previous joint injuries can also have an influence. Rheumatoid Arthritis symptoms can be mistaken for old age, but the potential organ damage makes it far more dangerous.

**Treatment:** Early diagnosis is important to ensure that there is prompt treatment ensuring joints and organs remain healthy and not permanently damaged. An accurate diagnosis is important to ensure appropriate treatment.

Normal Bone



Osteoporosis



## Osteoporosis

Osteoporosis is the decay and weakening of bones caused by old age. These bones are more likely to fracture at the slightest of trauma, and falling could be disastrous at such low bone density. Women are at the highest risk, especially after menopause. Pregnant and lactating women are also at risk if the calcium requirement during that time is not met. Factors that contribute to osteoporosis include: smoking, excessive alcohol consumption and a sedentary lifestyle.

**Prevention:** Regular exercise, but take care to not injure weakened bones. Consume adequate calcium, vitamin D and phosphorus, through food or supplements.

**Treatment:** Medication to stop the depletion of bone minerals, and other medicines to stimulate bone formation are available but it is best to seek professional advice from your Doctor.

*Reference*

*Clinician's Guide to Prevention and Treatment of Osteoporosis, National Osteoporosis Foundation*



The facts in this article were verified by:  
Dr. Jeyaratnam Satkunasingam  
Consultant Orthopaedic & Trauma Surgeon  
Suite 427, 4th Floor  
Mahkota Medical Centre

Brought to you by Mahkota Bone & Joint Replacement Centre

