# What exactly is Arthritis?







# Dr. Barry J Sheane Consultant Rheumatologist at Sports Surgery Clinic, explains

The term 'arthritis' means 'joint inflammation' and refers to disease of a joint, or in many cases, multiple joints. However, there are many forms of arthritis, and in turn, specific treatment and medication for those individual types of arthritis. A Rheumatologist is a doctor with specific skills that allow her or him to differentiate between the different kinds of arthritis and prescribe the relevant course of treatment.

In simple terms, Rheumatologists will determine if a patient's arthritis is one of two main forms: osteoarthritis or inflammatory arthritis. The differentiation between the two is of paramount importance because each type carries its own specific prognosis and will require different therapeutic approaches.

#### Osteoarthritis

Osteoarthritis (OA) is also referred to as 'degenerative' arthritis, 'wear-and-tear' arthritis, or arthritis 'of advancing age'. The lay term 'rheumatism' refers to OA. This condition can affect a single large joint such as a hip or a knee, but commonly affects multiple joints, including the articulation between the metacarpal bone of the thumb and wrist (manifesting as pain on the thumb-side of the wrist), the joints in the fingers closest to the nails ('distal interphalangeal joints' and manifesting as bony lumps) and that of the 'big toe'. A joint with osteoarthritis is typically more painful during or immediately after activity and may intermittently swell or even develop permanent deformity.

### Inflammatory arthritis

Inflammatory arthritis is that which is caused by, or involves, aberrancy in the immune system such that a system that ordinarily is used by the body to stave

off and fight infections, turns on specific components of the body, in this case the joints, and attacks them. This results in joint inflammation, which manifests in the sufferer as pain, swelling and morning stiffness in the affected joint or joints. Characteristically, these symptoms of inflammatory arthritis improve with movement or exercising the joint.

There are a variety of specific types of inflammatory arthritis, including Rheumatoid Arthritis (RA), Psoriatic Arthritis (PsA) and Ankylosing Spondylitis. Rheumatoid arthritis is the most prevalent in the community and, left undiagnosed and untreated, results in joint deformity and disability, particularly in the hands and feet. Psoriatic arthritis is a type of inflammatory arthritis associated with the skin disease psoriasis, and can also cause joint deformity, while ankylosing spondylitis primarily affects the joints of the spine, from the neck down and including the joints of the rib-cage. 'Ankylosis' means 'fusion' and 'spondylitis' refers to inflammation of the spine. Through this process of inflammation, the many articulations of the spine fuse, which can cause severe restrictions in movement for the patient.

## Treatment advances

Enormous strides to understand the genetics and immunology of these inflammatory arthritides have been made in the last three decades, culminating in an expanding repertoire of highly effective medications that target and block specific components of the immune system that are central in the perpetuation of these conditions. In contrast, OA has not been privy to the advancements that have been made in the science of inflammatory arthritis.

Currently, treatment options for a patient diagnosed with degenerative arthritis including physiotherapy, occupational therapy, pain-killers and/or joint injections with steroid/'cortisone'. If OA continues to advance, joint failure ensues. When this occurs in a large joint like the hip or knee, an orthopaedic surgeon will replace the failed joint with a prosthetic one, which is not without significant risk.

#### The 'bad arthritis'

In years past, Rheumatologists used to refer to inflammatory arthritis as 'the bad arthritis' because of the limited efficacious treatments available and as a consequence, the development of deformity and disability. While a cure for inflammatory arthritis does not exist, patients have a real chance of achieving disease remission with the medications currently on offer.

Unfortunately, this assurance cannot be given to sufferers of OA. There is no medication currently available that can halt the degeneration of the joint, and in that sense OA is the new 'bad arthritis' to have. However, scientists continue on the journey to understand the cause of OA and how it might be treated. Progress has been slow but it is time for researchers involved in musculoskeletal science to focus their efforts and resources on this neglected condition, so that the moniker 'bad arthritis' can be removed from that associated with OA.



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