Joint disorders, including osteoarthritis

Joint diseases are a common cause of discomfort, limitation of daily activities and disability.

Every movement of the body involves the utilization of multiple joints--the intersections between bones.

Arthritis is a general medical term used to describe any condition that causes joint inflammation.

Many diseases and disorders can inflame the joints, causing pain, swelling, stiffness and decreased range of motion.

The most common joint diseases in the United States include rheumatoid arthritis, osteoarthritis and gouty arthritis.

Rheumatoid Arthritis

Rheumatoid arthritis is a chronic autoimmune disease wherein the immune system attacks the lining of the joints.

A defining feature of rheumatoid arthritis is a symmetric pattern of joint involvement. This means that the involvement is the same on both sides of the body.

The finger joints closest to the hand and the wrists are commonly affected. Less commonly, the knees, hips, feet, ankles, elbows and shoulders may be involved.

Rheumatoid arthritis is characterized by severe symptoms punctuated by periods in which the disease is relatively quiescent.

Osteoarthritis

Osteoarthritis is a chronic condition caused by the slowly progressive deterioration of the cartilage between two bones.

Cartilage normally acts as a gliding and buffering surface between the bones. Loss of this tissue causes inflammation and pain.

Bony nodules may develop around the affected joints, causing deformity. The hips, knees, spine and the most distal finger joints are most commonly involved in osteoarthritis.

Obesity is a significant risk factor for osteoarthritis in the weight-bearing joints.

Gouty Arthritis

Gout is a medical condition usually characterized by recurrent attacks of acute inflammatory arthritis—a red, tender, hot, swollen joint.

The metatarsal-phalangeal joint at the base of the big toe is the most commonly affected (approximately 50% of cases).

However, it may also present as tophi, kidney stones, or urate nephropathy.

It is caused by elevated levels of uric acid in the blood.

The uric acid crystallizes, and the crystals deposit in joints, tendons, and surrounding tissues.

Clinical diagnosis may be confirmed by seeing the characteristic crystals in joint fluid.

Treatment with nonsteroidal anti-inflammatory drugs (NSAIDs), steroids, or colchicine improves symptoms.

Once the acute attack subsides, levels of uric acid are usually lowered via lifestyle changes, and in those with frequent attacks, allopurinol or probenecid provide long-term prevention.

Changes in diet can help alleviate symptoms and occurances of gouty arthritis.