Osteoarthritis is not a single disease but rather the end result of a variety of disorders leading to the structural or functional failure of 1 or more of an individual’s joints. It is the most common joint disease.

Osteoarthritis also involves an advancing loss of cartilage. The cartilage tries to repair itself, the bone remolds, the underlying (subchondral) bone hardens, and bone cysts form. This process has several phases. The stationary phase of disease progression in osteoarthritis involves the formation of osteophytes or joint space narrowing. Osteoarthritis progresses further with obliteration of the joint space. The appearance of subchondral cysts (cysts in the bone underneath the cartilage) indicates the erosive phase of disease progression in osteoarthritis.

Can affect any joint but most commonly weight-bearing joints such as hips, knees and spine. Hands and fingers are also commonly affected.

Causes of Osteoarthritis:

- No single cause but age is the leading risk factor.
- Traumatic Causes: Macro trauma injury to the joint such as a sports related injury or micro trauma injury from repeated small injuries from repeated movement can also increase risk.
- Endocrine: People with diabetes may be prone to osteoarthritis. Other endocrine problems also may promote osteoarthritis, including acromegaly, hypothyroidism, hyperparathyroidism, and obesity.
- Metabolic Diseases: Diseases causing errors of metabolism such as Paget disease and Wilson disease can cause osteoarthritis.
Symptoms of Osteoarthritis:

- Pain: Aching pain, stiffness, and swelling after activity or in response to a change of weather. The pain may get worse with overuse and may occur at night.
- Limited flexibility, especially after inactivity.
- Bony lumps at the end of fingers or on the middle joints of fingers.
- A grinding sensation when the joint is moved.
- Numbness or tingling in an arm or leg.

Treatment for Osteoarthritis

Medical Management Options:

- Over-the-counter painkillers can ease stiffness and pain.
- Nonsteroidal anti-inflammatory drugs (NSAIDS) may also help.
- Injection of hyaluronate that lubricates joints.
- Daily dose of glucosamine sulfate to help lubricate joints.
- Surgery to correct significant deformity of the joint or to reconstruct hip or knee joint.

Self-Management Options:

- Exercise to reduce stiffness and improve ability to move joints.
- Weight management to reduce stress and pressure on sensitive joints.
- Good posture to distribute weight and pressure evenly throughout the body.
- Application of heat or cold to relieve pain.

References & Additional Information
