

Osteoarthritis

This disease is the most common joint disorder. It is chronic disease that is also known as degenerative joint disease. Loss of articular cartilage combined with new bone formation leads to pain and deformity. It is characterized by asymmetric joint pain, pain which improves with rest, morning stiffness lasting under 30 minutes, and there is a proclivity towards involvement of the DIP and PIP joints. Crepitus can be seen in physical examination.



PLAY PICMONIC

Mechanism

Articular Cartilage Destruction

[Article Cartilage-cart destroyed](#)

Articular cartilage destruction occurs due to biomechanical stress and aging and genetic components.

Biomechanical Stress

[Bio-mechanical Joint Under Stress](#)

Factors such as obesity, muscle strength, and joint stability, structure and alignment can lead to biomechanical stress.

Aging

[Old ostrich](#)

The risk of OA increases greatly in individuals over the age of 50. It is a degenerative disease, and is seen in patients who are older, as they have had more use of their joints than younger individuals.

Signs and Symptoms

Asymmetric

[Asymmetrical Damage](#)

Unlike in rheumatoid arthritis, OA presents with asymmetric joint involvement.

Pain Decreases with Rest

[Pain-bolts decreasing with Bedrest](#)

Unlike in rheumatoid arthritis where pain improves with use, in OA pain improves with rest.

Morning Stiffness Under 30 Minutes

[Stiff-board Under 30 Minute Morning-sun](#)

Patients with OA complain of morning stiffness that lasts a short time (usually under 30 minutes). This is unlike patients with RA who will typically complain of morning stiffness that lasts greater than 30 minutes.

Crepitus

[Carpenters](#)

Crepitus is an audible or palpable crackling that occurs upon joint movement. This grating sensation is caused by loose cartilage particles in the joint area that contributes to stiffness.

DIP and PIP Joints

[Dip and Pipe Joints](#)

OA affects the DIP and PIP joints unlike RA which affects the PIP and MCP joints. Heberden's nodes affect the DIP joint and Bouchard's nodes affect the PIP joint in OA.

Treatment

Lifestyle Changes

[Lifestyle-magazine](#)

Weight loss and exercise are recommended for the patient, as excess weight can lead to increased joint degeneration.

Acetaminophen or NSAIDs

[A-cheetah-with-a-fin and N-sad](#)

Painkillers are often used to help the patient deal with the pain. NSAIDs are avoided in older patients that may be more susceptible to GI bleeds. Intra-articular corticosteroid injections are sometimes used to decrease pain over the short term.