

## Osteoarthritis Assessment

This disease is the most common joint disorder. It is a slowly progressive and chronic noninflammatory disorder also known as degenerative joint disease. Loss of articular cartilage combined with new bone formation leads to pain and deformity. Osteoarthritis (OA) involves asymmetric joint involvement, pain that improves with rest, morning stiffness usually under 30 minutes, crepitus, and often affects the DIP and PIP joints.



PLAY PICMONIC

### Mechanism

#### 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.

#### Articular Cartilage Destruction

##### Article Cartilage-cart Destroyed

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

#### Biomechanical Stress

##### Bio-mechanical Joint Under Stress

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

### Signs and Symptoms

#### Asymmetric

##### Asymmetrical Damage

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

#### Pain Decreases with Rest

##### Down-arrow Pain-bolt 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 Minutes 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. Contrast this to RA, which affects the PIP, MCP, and joints of the feet (MTP). Heberden's nodes (affecting the DIP joint) and Bouchard's nodes (affecting the PIP joint) can be seen, which are nodes that appear red, swollen, and tender.