

Osteoarthritis

January 12, 2026 • vajiramandravi.com



Osteoarthritis Latest News

In a promising breakthrough, scientists at Stanford University recently identified a key protein called 15-PGDH linked to cartilage loss during aging, offering hope for new treatments for osteoarthritis.

About Osteoarthritis

- **Arthritis** is a general term that means **inflammation of the joints**.
- **Osteoarthritis (OA)**, commonly known as **wear-and-tear arthritis**, is the **most common type of arthritis**.
- **What Causes OA?**
 - It is associated with a **breakdown of cartilage in joints**.
 - **Cartilage** is a **firm, rubbery material** that **covers the ends of bones** in normal joints.
 - Its main **function** is to **reduce friction in the joints** and serve as a “**shock absorber**”.
 - The shock-absorbing quality of normal cartilage comes from its ability to change shape when compressed (flattened or pressed together).

- **Osteoarthritis causes the cartilage in a joint to become stiff and lose its elasticity**, making it more **susceptible to damage**.
- **Over time**, the **cartilage may wear away** in some areas, greatly **decreasing its ability to act as a shock absorber**.
- As the cartilage deteriorates, **tendons and ligaments stretch, causing pain**.
- If the condition worsens, the **bones could rub against each other**.
- It **commonly occurs in the weight-bearing joints** of the **hips, knees, and spine**.
- It **also affects the fingers, thumbs, neck, and large toe**.
- It usually **does not affect other joints unless previous injury**, excessive stress, or an underlying disorder of cartilage is involved.
- It is more **likely to develop as people age**. But it can affect much younger people, too, especially those who have had a prior joint injury.
- **Symptoms:** Symptoms of osteoarthritis most often **develop gradually and include:**
 - **Joint aching and soreness**, especially with movement
 - **Pain after overuse or after long periods of inactivity**
 - **Stiffness** after periods of rest
 - **Bony enlargements in the middle and end joints of the fingers** (which may or may not be painful)
 - **Joint swelling**
- **Treatment:**
 - Although there is **no cure** for osteoarthritis, there are many **treatment options** available to help **manage pain** and keep people active.
 - As a **last resort, a damaged joint may be surgically fused or replaced** with one made of a combination of metal, plastic, and/or ceramic.

Source: NDTV

Source: <https://vajiramandravi.com/current-affairs/what-is-osteoarthritis/>

© Vajiram & Ravi. For personal use only.