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## **Review Article**

## Review on Osteoarthritis and Cartilage Treatment

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Osteoarthritis is the common chronic joint problem. The ends of bones are enclosed with defensive tissue called cartilage. With osteoarthritis (OA), this cartilage breakdowns, causes the bones inside the joint to rub together which cause aching, stiffness, and other signs.

OA arises most often in older age, though it can happen in adults of any age. OA is also called degenerative joint disease, wearand-tear arthritis & degenerative arthritis. Leading cause of disability, OA treatment to prevention:

## **Osteoarthritis Causes**

OA is caused by joint impairment. This harm can accrue over time, age is one of the main causes of the joint damage leading to osteoarthritis. The older you are, the more wear and tear on joints. Joint damage may happen due to past injury, such as dislocated joints, torn cartilage & ligament injuries. Some factors also include obesity, joint malformation and poor posture. Certain peril factors, such as family past and gender, increase your risk of osteoarthritis. Cartilage is a flexible substance and softer than bone. Its job is to protect the ends of bones within a joint and allow them to move easily against each other. When cartilage breaks down, bone surfaces turn out to be pitted and rough which will cause pain within the joint, and irritation in adjacent tissues. Cartilage doesn't contain any blood vessels so it can't repair itself that can cause strong pain and other signs associated with OA. The most commonly affected areas of the body include the knees, hands, fingertips, hips, spine however OA can affect any bone joints of body, typically at the neck or lower back. The common symptoms include: pain, discomfort, stiffness, inflammation. As OA becomes more older, the pain associated with become more intense. Over time, bulge in the joint and adjacent area may also occur. Identifying the initial symptoms of OA can help better manage. Severe osteoarthritis

is a advanced condition with five stages? The first stage (0) represents a normal joint. Stage 4 represents severe OA. People with severe OA have widespread or complete loss of cartilage. The friction on bone connected with this can cause severe symptoms such as Increased swelling and inflammation. The amount of

synovial fluid within the joint may increase. Normally, this fluid helps reduce friction during movement. However, in larger amounts, it can cause joint swelling. Fragments of broken-off cartilage may also hang inside the synovial fluid, growing pain and inflammation. Increased discomfort may feel pain during activities, but also when you're at rest. You may feel an upsurge in your pain level as the day developments, or more swelling in your joints if you've used them a lot throughout the day. Decreased range of motion. You may not be able to move as well, due to difficulty or pain in your joins. This can make it harder to enjoy the day-to-day activities that used to come easily. Joint instability may become less stable. For instance, if simple OA in your knees, you may experience locking and experience fastening when your knee gives out, which can cause falls and injury. Joint suffers to wear down, bone spurs, muscle weakness and joint deformity may also occur. The joint damage caused by severe OA isn't reversible, but treatment can help decrease symptoms. Osteoarthritis vs. rheumatoid arthritis OA and rheumatoid arthritis (RA) share the same symptoms but are very dissimilar conditions. OA is a worsening condition, which means that it increases in severity over time. RA, on the other hand, is an autoimmune disorder. People with RA have immune systems that error the soft lining around linkages to be a threat to the body, causing it to attack that area. This soft coating, which includes the synovial fluid, is called the synovium. As the immune system unveilings its battering, fluid build-up within the joint happens, causing stiffness, swelling, pain and inflammation. Osteoarthritis diagnosis is often a slow-developing disease that can be stiff to analyse until it starts to cause aching or debilitating symptoms. Early OA is often diagnosed after an accident or other incident that causes a break requiring an X-ray. In addition to X-rays, your doctor may use an MRI scan to diagnose OA. This imaging test uses radio waves and a magnetic field to create images of bone and soft tissue. Other analytic tests include a blood test to rule out other conditions that cause joint pain, such as RA. A joint fluid analysis can also be used to determine whether gout or infection is original cause of inflammation. Osteoarthritis treatment OA treatment is cantered upon symptom management.

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