

Diagnosis: Osteoarthritis

What is it?

Osteoarthritis (OA) is the most common type of arthritis, or joint disease. OA involves the destruction of cartilage between the joints and remodeling of the bony parts of the joints. It leads to disability for many people due to chronic joint pain and limitations in function.

Common symptoms of OA include pain, swelling, tenderness, and stiffness of one or more joints. OA can also cause joint deformities and limitations in joint range of motion. Instability of joints can occur, often described as a “buckling” or “giving way”. The most common joints affected include the knees, hips, hand joints, and spine of the neck and low back. The pain of OA can be aching, sharp, or burning. Pain and weakness can also occur in the surrounding muscles.

What causes it?

OA is often incorrectly thought of as a degenerative joint disease due simply to “wear and tear” and mechanical load on the joints. OA is actually a complex disease process involving joint inflammation and biomechanical factors. Inflammatory factors and proteases (enzymes that break down proteins) cause breakdown of the cartilage and other parts of the joint structure, as well as thickening and extra bony growths called osteophytes (bone spurs).

Prior joint injuries (including injuries of the cartilage, ligaments, bones, and other joint structures) can increase the risk of OA by triggering the inflammatory process. This is often called post traumatic OA. Anatomical factors due to congenital joint conditions, such as hip dysplasia, can also make joints more prone to OA. OA is more likely to occur as we age. Changes in the joint with aging cause the joint to be more prone to the joint inflammation of OA. Genetics are important as well. Research from twin studies found that genetics account for 40% of the risk for knee OA.

Body Size and OA

Most healthcare providers incorrectly believe that higher body weight is the primary cause of joint pain and OA due to a greater mechanical load on the joints. Fat people are typically blamed for their OA due to their body size. They are often advised to lose weight as the primary treatment for their condition while thin people are offered other treatment options.

OA actually occurs in people of all body sizes, and not all fat people develop OA. It is important to remember that even if something happens more often to those in fat bodies, that does not

indicate that body size is the cause. In addition to OA of the knees and hips, fat people are more likely to have OA of the hands, which are not weight-bearing joints affected by the mechanical load of body size.

Instead of being a mechanical or “wear and tear” condition, OA is an inflammatory and metabolic condition. Metabolic conditions, including insulin resistance, high blood pressure, high cholesterol, and diabetes, have been linked to OA. Experiencing weight stigma and weight cycling are independently associated with metabolic conditions and inflammation and may be a factor in the higher risk of OA among fat people as well.

Even if body weight was determined to play a direct causal role in the development of OA in addition to these mediators, this still does not warrant blaming fat people for having OA or justify prescribing weight loss. We know that there is normal diversity of body sizes, that extensive research shows that dieting is ineffective and harmful, and that weight stigma in medical care puts fat people’s health at risk. Read more about why we don’t recommend weight loss here: <https://haeshealthsheets.com/why-we-dont-recommend-intentional-weight-loss/>

People in larger bodies are also often denied joint replacement surgeries due to their body size despite having debilitating pain or functional limitations due to OA. They are instead advised to lose weight first before they can qualify, and some are even advised to have weight loss surgery before joint surgery. These recommendations and restrictions are not evidence-based and limit access to a necessary surgery. Read more about joint replacement and weight stigma here: <https://haeshealthsheets.com/joint-replacement/>

How is it diagnosed?

The diagnosis of OA can often be made when the classic signs and symptoms are present. Your HCP will perform an exam of the joints to look for swelling, tenderness along the jointline, joint deformities, crepitus (a crunching sound of the joint with movement), and instability of the joint. Other joint conditions that may be considered when assessing for OA include rheumatoid arthritis, psoriatic arthritis, gout, and soft tissue abnormalities (ligament or muscle injury, bursitis, tendonitis). X-rays can be useful to assist in making the diagnosis of OA and distinguishing between different types of arthritis. However, it is important to know that symptoms of OA can begin a few years prior to the onset of abnormal findings on X-rays. An MRI is sometimes ordered if there is concern for soft tissue injuries or instability of the joint. Your healthcare provider may also recommend lab testing, including inflammatory markers and a rheumatoid arthritis test, if they are concerned about other forms of arthritis. Learn more about other causes of joint pain and their treatment here: <https://haeshealthsheets.com/joint-pain/>

Treatment Options

Evidence-based treatment options for Osteoarthritis include:

Movement: Physical therapy and low-impact movement (walking, cycling, aquatic exercise, Tai chi) can strengthen the muscles around the joint, and help with pain and function

Bracing: Unloader braces can be helpful for reducing pain and improving joint function

Anti-inflammatory medications: NSAIDs, both oral pills and topical gels, are effective for reducing pain

Other medications:

- Topical capsaicin: Made from hot chili peppers and acts on the sensory pain neurons
- Duloxetine: Works by short-circuiting the central pain pathway
- Acetaminophen: Provides limited benefit in the short-term

Injections: Limited evidence for steroid, hyaluronic acid, and platelet-rich plasma injections

Surgery: Total joint replacement when indicated for severe osteoarthritis and persistent symptoms despite non-surgical treatments. Other less invasive surgeries include arthroscopy, osteotomy, hip resurfacing, or partial joint replacement. Read more about joint replacement here: <https://haeshealthsheets.com/joint-replacement/>

Overall

OA happens to people of all sizes and has multiple possible causes and contributing factors. OA should be treated in people of all sizes through evidence-based methods and not attempts at body size manipulation, always keeping in mind the patient's priorities and goals.