

What is osteoarthritis?

Osteoarthritis (OA) is a complex and multifactorial chronic joint disease that mainly affects cartilage. It mostly affects large joints in knees, hips, lower back and neck, and small joints of the fingers and toes.

Cartilage is the tissue that covers the end of each bone, provides a slippery and smooth surface for joint motion (acting as a cushion between the bones) and helps absorb the shock of movement. In OA, the top layer of cartilage wears away, causing bones under the cartilage to rub each other which eventually causes pain, inflammation, swelling and loss of joint motion.

As OA becomes severe, the joint may lose its normal shape, bone spurs may grow on the edges of the joints, and small bits of bone or cartilage may break off and float inside the joint space, causing more damage and pain^{1,2}. OA is considered as one of the most significant causes of disability in the world³.

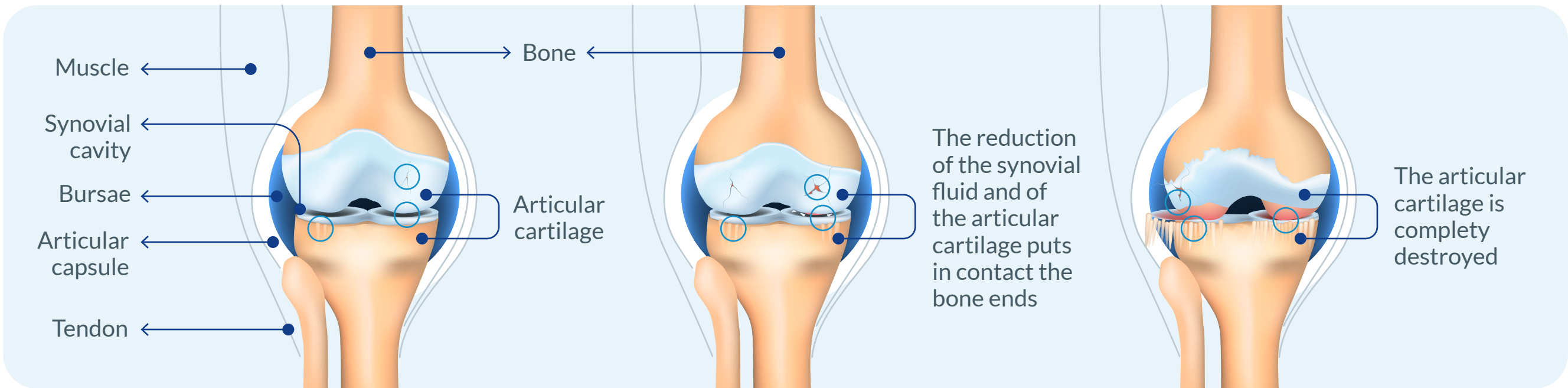


Figure 1. This figure shows the alterations that occur in the joint during the onset of osteoarthritis (OA).

What risk factors are associated?



You are **>65 years old**⁴ › The risk of developing OA increases with age¹.



You have a **family member** who has developed OA › People with family members with OA are more likely to develop it in the future¹.



You are a **female** › Women are more likely than men to develop OA¹.



You are **overweight or obese** › Every 5kg of weight gain confers a 36% increase in the risk of developing knee OA⁵.



You perform **high intensity level sports** › People who do sports have been shown to have a 4.5 times higher risk of developing OA⁶.



You have had a **joint injury** in the past › A joint break or tear can lead to OA even after several years¹.



How is OA diagnosed?

No test can diagnose osteoarthritis, alone.

Physicians use several methods to differentially diagnose osteoarthritis¹ such as:

- Going over symptoms and medical history.
- Performing a physical examination.
- Evaluating X-ray and/or MRI images.
- Asking for further blood or joint fluid analyses.



What treatments are available?

After diagnosis, physicians generate personalized treatment plans based on the needs, lifestyle, and health of their patients. These plans involve¹:

- **Exercise:** avoiding high-impact activities. Usually slow-moving exercises such as pilates, yoga or tai-chi, which can help improve balance.
- **Weight control:** maintaining a normal weight will prevent the extra weight of affecting the joints.
- **Rest and joint care:** Not stressing the joints is essential.
- **Non-drug pain relief techniques** such as cold/hot patches.
- **Medicines** for pain relief: analgesics, NSAIDs, SYSADOAs*, etc.
- Complementary and **alternative therapies** such as acupuncture.
- For most advanced cases, **surgery**.

*SYSADOAs: Symptomatic Slow Acting Drugs for Osteoarthritis.



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3. Musumeci G et al. Osteoarthritis in the XXIst century: risk factors and behaviours that influence disease onset and progression. Int J Mol Sci. 2015;16(3):6093-112.
4. Fernandes L et al. EULAR recommendations for the non-pharmacological core management of hip and knee osteoarthritis. Ann Rheum Dis. 2013;72(7):1125-35.
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