

Physiotherapy and osteoarthritis

Get the right relief



What is osteoarthritis?

Osteoarthritis (OA) is a relatively common condition which can lead to changes in joint structure. It is quite common in most joints of the body, including the knee, hip, spine, hands and feet².

OA often involves a decline in the health of the cartilage which lines the joint surfaces, and this may lead to changes in the bones around the joint. OA can lead to a reduced range of motion in the joint and a feeling of stiffness^{3,4}. The joint changes may or may not also cause increased pain and physical limitations. In long-term OA, the nervous system may adapt, and this can increase the pain response.

Symptoms and causes

OA symptoms include joint stiffness, pain and physical limitations^{1,6}. The pain and functional impact of OA can affect your mental health and anxiety levels¹, leaving you uncertain about how to get the right balance between rest and movement. Increased body-wide inflammation can contribute to OA through low levels of physical activity, higher levels of body fat and a diet high in processed foods⁹.

Whilst OA is more prevalent with increasing age¹, it does not always mean that the pain or physical limitation you are experiencing will get worse over time^{7,8}. It is important to understand that the pain that occurs with OA is not strongly related to the deterioration that appears in the joint on scans⁵, and that treatment can reduce symptoms and improve physical function.



OA is the most common form of arthritis, with roughly **9.3 per cent of people** in Australia having OA¹.



33%
75yr old+

OA prevalence increases from age 45, and **after age 75 roughly 1/3 of people** have OA¹.



Opioid medications **are not recommended** for the treatment of hip and or knee OA¹⁰.



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How can physiotherapy help?

Physiotherapists are highly educated, trained and competent in assessment, diagnosis, education and advising what the best treatment options are for you. For OA, your physiotherapist will conduct an assessment of all the relevant issues. This includes the strength and flexibility of the joints, your goals and personal situation and what understanding you have of OA. They will also screen you for non-musculoskeletal causes of your pain and refer you for a medical assessment if required. Addressing these can reduce the impact that OA has on your movement and life.

Physiotherapists can also provide you with a likely prognosis by using an evidence-based approach, drawing on their clinical expertise and providing tailored advice and management. If needed, your physiotherapist may also help you navigate the health system and connect you to the best health services for your situation.

There is no 'one-size-fits-all' and your physiotherapist will be able to advise you what management is best for you, as well as clear up misinformation or confusing advice you may have received.

Treatment

Physiotherapy involves evidence-based treatment options which are non-pharmaceutical and non-surgical in nature. Physiotherapy treatment is always 'patient-centred', ensuring you are informed and respected in the decision-making process. Research shows⁷ that education and treatment which empowers you is a significant part of effective OA management.

Physiotherapists will work with you to explore all the possible interventions and work out what is best for you. This may include hands-on treatments or developing an exercise or activity program to reduce pain, improve flexibility and strength and regain the confidence to move.

High-level evidence shows that exercise and physical activity are key to reducing inflammation and pain and improving function. Your physiotherapist will help you to determine what level of activity is enough to challenge your body and your OA joint, but not enough to cause a flare in symptoms⁹.

What next?

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REFERENCES

1. Australian Institute of Health and Welfare (AIHW) [Internet]. Osteoarthritis. Canberra: AIHW; 2020 [cited 2022 July 29]. Available from: [Osteoarthritis. What is osteoarthritis? - Australian Institute of Health and Welfare \(aihw.gov.au\)](https://www.aihw.gov.au/osteoarthritis)
2. National Institute on Aging (NIA) [Internet]. Osteoarthritis. National Institutes of Health (NIH): U.S. Department of Health and Human Services; 2017 [cited 2022 July 29]. Available from: [Osteoarthritis | National Institute on Aging \(nih.gov\)](https://www.nia.nih.gov/health/osteoarthritis)
3. Steenkamp W, Rachueña PA, Dey R, Mzayiya NL, Ramasuvha BE. The correlation between clinical and radiological severity of osteoarthritis of the knee. *SICOT J* [Internet]. 2022 [cited 2022 July 29];8(14). Available from: [The correlation between clinical and radiological severity of osteoarthritis of the knee - PMC \(nih.gov\)](https://pubmed.ncbi.nlm.nih.gov/39484848/)
4. Katz JN, Arant KR, Loeser RF. Diagnosis and Treatment of Hip and Knee Osteoarthritis: A Review. *JAMA*. 2021;325(6):568-579. Doi:10.1001/jama.2020.22171
5. O'Neill TW, Felson DT. Mechanisms of Osteoarthritis (OA) Pain. *Curr Osteoporos Rep* [Internet]. 2018 [cited 2022 July 29];16:611-616. <https://link.springer.com/article/10.1007/s11914-018-0477-1>
6. Bastick AN, Runhaar J, Belo JN, Bierma-Zeinstra SMA. Prognostic factors for progression of clinical osteoarthritis of the knee: a systematic review of observational studies. *Arthritis Res Ther* [Internet]. 2015 [cited 2022 July 29];17(152). Available from: [Prognostic factors for progression of clinical osteoarthritis of the knee: a systematic review of observational studies](https://pubmed.ncbi.nlm.nih.gov/26044448/)
7. National Clinical Guideline Centre (UK). Osteoarthritis: care and management [Internet]. NICE Clinical Guidelines, No.177; London: National Institute for Health and Care Excellence (NICE); 2020 [cited 2022 July 29]. Available from: [Osteoarthritis: care and management - NCB Bookshelf \(nih.gov\)](https://www.nice.org.uk/guidance/CG177)
8. Luan L, El-Ansary D, Adams R, Wu S, Han J. Knee osteoarthritis pain and stretching exercises: a systematic review and meta-analysis. *Physiotherapy*. 2022;114:16-29.
9. J. Runhaar, D.P. Beavers et al. Inflammatory cytokines mediate the effects of diet and exercise on pain and function in knee osteoarthritis independent of BMI. 2019. Available from [Inflammatory cytokines mediate the effects of diet and exercise on pain and function in knee osteoarthritis independent of BMI](https://pubmed.ncbi.nlm.nih.gov/31444448/)
10. Royal Australian College of General Practitioners. Guideline for the management of knee and hip osteoarthritis [Internet]. 2nd ed. East Melbourne, VIC: RACGP; 2018 [cited 2022 July 29]. Available from: [Guideline-for-the-management-of-knee-and-hip-OA-2nd-edition.pdf \(racgp.org.au\)](https://www.racgp.org.au/clinical-guidance/guidelines/guideline-for-the-management-of-knee-and-hip-OA-2nd-edition.pdf)