

HIP OSTEOARTHRITIS

What is it and tips for self-management

What is hip osteoarthritis?

Osteoarthritis (OA) is a long-term condition that can impact any joint in the body, with the hip being among the most commonly affected joints, along with the knee and hand. Hip OA can occur at any age, but it is more likely to develop as we get older. Even though it is not an inevitable part of aging it is so common that it is sometimes considered as part of the normal aging process.

OA affects the entire joint, including ligaments, joint capsules, muscles and nerves, as well as the bones and the joint cartilage. Hip OA is not a result of one single thing, but a combination of a wide range of systemic, genetic, biomechanical and environmental factors that can contribute to the development of OA. We do not know enough about the risk factors yet, but the following factors can predispose us to hip OA:

- Obesity (not only due to the increased loading to the joint but also due to the metabolic factors associated with obesity).
- Previous injury to the joint.
- Increased age.
- Family history of the condition (genetics).
- Abnormal loading or alignment.
- High levels of (repetitive) physical loading, e.g. participation in sport/physically demanding work.

Symptoms

The extent of changes in the joint does not correlate very well with the severity of the symptoms experienced with OA. In fact, it should be noted that not everyone with OA will experience symptoms, and for those who do, these symptoms may fluctuate and change over time. Individuals with hip OA may experience:

- Pain
 - often related to activity and eases with rest, but may become more persistent and occur also during rest and night time
 - often felt in the groin, upper front thigh, but even widespread symptoms elsewhere in the body are not so uncommon.
- Stiffness
 - especially after periods of not moving, e.g. in the morning or after sitting for long periods of time.

- Functional limitations
 - e.g. difficulties in putting on socks.
- Muscle weakness.
- Reduced joint range of motion, and crepitation (noise) from the joint during movement.
- Fatigue, i.e. feeling of tiredness, exhaustion or lack of energy.

Hip OA and pain

Pain is the primary reason individuals seek care for hip OA. Previously, it was believed that pain was directly linked to changes in the joint structures. For instance, it was assumed that the 'thinner' your cartilage, the more severe your symptoms. However, now we know that this is not the case and in fact there are multiple factors, many of which we can modify, that in combination influence your symptoms.

Pain is an uncomfortable sensory and emotional experience. It acts as an alarm response created by your nervous system. Your brain receives various signals originating from your body, but also other information e.g., your past experiences, beliefs and emotions, etc. and if needed it raises an alarm, i.e. pain in people with OA, pain can be related to:

- an injury to the hip joint.
- an injury to the neural structures.
- inflammation in the joint which is sometimes seen in OA.
- other factors affecting your pain experience such as emotional state (e.g. anxiety or depression), tiredness, pain beliefs and previous experiences.

The “alarm system” that is your pain can be sensitised so that, for example normal touch can be misinterpreted as potentially harmful and therefore felt as pain. This is more common with persistent pain.

How is hip OA diagnosed?

Imaging, e.g. X-ray, is not needed to diagnose hip OA unless there are atypical symptoms that may require exclusion of other/additional diagnosis. Health care professionals can diagnose hip OA in adults who are 45 years or older using clinical criteria such as the presence of activity-related joint pain, and absence of hip joint stiffness in the morning or hip joint stiffness that lasts less than 30 minutes).

How to manage it?

The goal of managing hip OA is to manage your pain and other symptoms, improve your level of functioning, and enhance your quality of life. In other words, we can not reverse the changes in your hip joint, but we can manage and reduce the symptoms so that you can enjoy your life to the fullest with as few limitations as possible.

Hip OA symptoms can often be greatly reduced with conservative (i.e. non-surgical) management, and therefore many individuals do not need joint replacement surgery (arthroplasty). The first line of management comprises physical activity and exercise, education, and when needed, weight management and pain medication. The severity of your OA does not influence the possible benefits you may achieve from these first line managements.

Your activity and commitment to self-management is crucial in the management of your hip OA.

Physical activity and exercising

Engaging in regular physical activity and exercise is highly recommended, as it not only helps in managing your pain and maintaining or improving your functional abilities but may also positively impact your mental health and overall wellbeing. Since pain and functional limitations can adversely affect your mood, as well as your physical and social activities, participating in physical activity and exercise can help to boost your self-confidence, reduce stress, enhance social function and overall mental wellbeing, proving that you're capable of doing more than you might believe.

It is not uncommon to feel that using and loading your hip will further harm the joint structures. However, you can feel safe to move as physical activity and exercise does not do harm to your joints and joint structures. Actually, it can improve the joint cartilage at early stages of OA.

Physical activity includes specific exercises such as strengthening, but also any other activity where the primary aim is not necessarily to exercise e.g. walking to the store, gardening, cleaning, taking the stairs instead of the lift/elevator, etc. Incorporating active elements into your daily routine, such as walking instead of driving, is a great way to build up your weekly activity. Keep in mind that spending too much time sitting can actually worsen your symptoms and increase your risk of developing other age-related issues such as Type 2 diabetes and heart problems.

In addition to being active in your daily routines, it is recommended to engage in regular exercise such as progressive strengthening exercises and aerobic exercises such as walking.

Does it matter how and how much I move?

Essentially, it's up to you to choose the activities that are easily accessible and enjoyable as this will help you to stay consistent with the routine. Some people prefer group settings, while others enjoy home-based workouts. The key is to engage in regular, long-term exercise (ideally something every day).

The optimal dosage and progression of physical activity and exercise is not yet fully understood. We know that not being active is not the best fit for joint health, nor is extreme loading. Moderation will be beneficial for your hip joint health (and your health overall). Ideally you should have an exercise program individually tailored to your needs together with your health-care practitioner that you follow on a regular basis and where the intensity and/or duration should be gradually increased over time. Digital tools, like mobile apps, can be helpful for getting used to a routine and learning specific exercises recommended by your healthcare practitioner. Even doing just a few exercises consistently, preferably every day, can make a difference.

In general, it is advised to follow recommendations from the World Health Organization (WHO) as abilities and conditions allow. Individuals with hip OA may have other longstanding conditions that would also benefit from a healthy and active lifestyle. However, it is good to acknowledge with your health care practitioner how these conditions need to be considered when planning your physical activity and exercise programs.

The current guidelines from the World Health Organization (WHO) recommends adults the following weekly levels of physical activity:

- Aerobic physical activity:
 - 150 to 300 minutes of moderate-intensity, or;
 - 75–150 minutes of vigorous intensity, or;
 - a combination of vigorous and moderate.
- Strengthening exercises:
 - for all major muscle groups;
 - at moderate or greater intensity;
 - on 2 or more days a week.

WHO also recommends:

- reduced time spent inactive;
- increased time spent active at any intensity (e.g. take the stairs instead of the elevator);
- to do aerobic and/or strengthening exercises more than recommended for additional health benefits.

Load management/activity modification

Flare-ups are quite common in hip OA. During flare-ups, when symptoms are more intense, you may need to take it easier and pace yourself. Try to remain active, but perhaps in shorter bouts, with more breaks and /or gentler activities e.g. water-based training. Also take advantage of mobility aids such as a stick or a walker to reduce the strain when needed. Using walking aids can help you to stay active and do things that matter to you, which is crucial in OA management.

Exercise and physical activity can also occasionally result in an increase in symptoms. However, this does not mean the exercise or activity is harmful or dangerous to your joint health. As you continue with your exercise regimen for a month or so, it's likely that these flare-ups will occur less frequently.

Take care of your overall well being

It is recommended to take care of yourself overall. As mentioned earlier, pain is not strictly a result of structural changes in the joint. Other things affect your pain experience and prognosis.

For example, if you are experiencing sleep problems, low mood or excess stress it is important to address these issues so seek further support and advice, if needed.

Weight management

It is recommended to maintain or aim for a healthy weight. In the case of obesity or being overweight, weight management should include adjustments to your physical activity and diet. Healthy weight has benefits that are wider than just the management of your hip OA, but even a small reduction in weight (if obese/overweight) can have a positive impact on your pain. Seek more advice and support from your health care practitioner if needed.

It is never too late to start caring for yourself, but it is good to acknowledge that:

- maintaining weight can be easier than getting rid of weight (especially as you age).
- maintaining muscle strength takes less effort than getting stronger.
- maintaining activity levels can be easier than increasing them.

If you wait until your symptoms get worse before you start caring for yourself, it will require more effort to achieve.

Pain medication

In general, the use of pain medication in hip OA is ideally a short-term treatment to manage pain and allow you to stay active. However, it is good to check with your healthcare practitioner first as oral Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) are not risk free and suitable for all, especially if you have other health conditions and/or medications. It is recommended to use medication for the shortest possible time and the lowest effective dose.

Current recommendations do not support the use of strong opioids, Glucosamine or intra-articular hyaluronan injections. Nor is Paracetamol recommended as first line treatment due to lack of evidence supporting its effectiveness. Corticosteroid injections may be considered for short-term pain relief if e.g. other suitable pain medications are not an option or are ineffective.

Other considerations

One can consider using shoes without raised heels and with thick, shock-absorbing soles, that support the arches of the foot and see if this reduces your symptoms. Cold/heat and manual therapy, such as passive joint range of movement exercises, can also be used as adjunct therapies for short-term pain management, if needed. However, it is good to acknowledge that the effectiveness is not certain.

Before investing a lot of money into electrotherapies (e.g. TENS), acupuncture or dry needling, it is good to acknowledge that these are likely not effective and therefore not recommended as part of your first line treatment.

Have patience! It's important to dedicate yourself to rehabilitation, including regular activity and exercises for a minimum of six weeks before trying to determine the effectiveness of the conservative management.

What about hip replacement surgery?

In cases where sufficient improvements in pain and functioning are not achieved after actively following this conservative management approach for the recommended time, and when symptoms significantly affect your quality of life, joint replacement surgery may be a viable option to consider. However, one should acknowledge that surgery is not an effective pain management treatment for all.

If the management approach selected for you is not helping within the discussed time, or if you're having trouble with or are uncertain about any aspect of the approach (exercises, what to do during flare-ups, etc.), please reach out to your healthcare professional for a follow-up or advice on what to do next.

Key take home messages

- Physical activity and exercise, education and activity modification are the first line treatment of hip OA.
- Regular physical activity and exercises are safe and can improve your symptoms.
- Pain is not a good indicator of the severity of any structural changes and vice versa.
- Increased pain does not mean you are doing something harmful that will damage your joint.

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