# Managing Your Hip or Knee Osteoarthritis (OA)

# What is Osteoarthritis (OA)?

OA is the most common type of arthritis affecting more Canadians than all other forms of arthritis combined. OA is a disease of the **whole joint** that leads to breakdown of joint cartilage and the underlying bone. It also affects the soft tissues in the joint such as the joint capsule, menisci and ligaments. OA used to be described as a degenerative or "wear-and-tear" arthritis, but recent studies describe it as a result of the body's failed attempt to repair damaged joint tissues. This leads to pain, stiffness, swelling and reduced range of motion in the affected joint.

The hips and knees are the most commonly affected joints with OA. OA typically develops slowly, over many years. There are factors that contribute to developing OA. Factors such as age, gender and genetics cannot be changed. Things that can be changed include a sedentary lifestyle/inactivity, being overweight, joint damage from a previous injury, high repetitive loads and muscle weakness.

There is no cure for OA however there are ways to manage symptoms and improve function. These include self-management strategies, medications, and for severe OA, possibly joint replacement surgery. Self-management include exercise, physical activity, weight loss, assistive devices, and pain relief options.



## **Physical Activity**

It is important to be physically active every day. Loading and unloading a joint is essential for healthy cartilage! Regular physical activity can reduce the pain, aching, and stiffness related to your osteoarthritis. Walking, biking, yoga, Tai Chi, swimming, aqua-fit, and walking in a pool are all good activities that are gentler on the joints. Increasing physical activity benefits your overall health- reducing the risk of heart disease and diabetes. Choose an activity that you enjoy and that will keep you motivated.

#### If you feel pain when you are active, it does not mean you are damaging your joints

**further**. If an activity does make your symptoms worse, consider activity modification (such as frequent rest breaks and pacing) and pain medication (both over the counter and prescription). Aim for 30 minutes of physical activity 5 days per week in addition to your regular activities of daily living. You can start small and gradually increase the amount of physical activity that you complete every day. If you are not currently physically active, try 5 minutes of activity and then try to perform it a few times a day until you are able to tolerate more! There are many resources available in community that will help you reach your goals.

## Weight Management

Being overweight is a risk factor for development and progression of osteoarthritis and can make joint pain and mobility worse. Losing weight is an important part of managing



osteoarthritis for everyone. Weight loss can reduce your symptoms of pain and stiffness, improve function and slow down the progression of arthritis. If you have osteoarthritis and are overweight, it is recommended to lose at least 5% to 10% of your body weight to notice improvement. If you are at a healthy weight you should continue to maintain it.

If you need help, your health care professionals should refer you to a dietitian or weight management program. They can support you with information and advice on things like how eating and exercise work together to affect your weight and how to stay motivated and reach your weight loss goals.

## **Therapeutic Exercise**

Currently, the most effective non-surgical treatment of hip and knee osteoarthritis is therapeutic exercise and physical activity. Exercise has been shown to reduce pain, disability and medication use and to improve physical function.

If you have osteoarthritis in your hip or knee, doing specific types of exercises can reduce your pain and improve your ability to move. A physiotherapist is a rehabilitation professional who will assess you and provide with you with key exercises to address problem areas.

Your exercise program should target the muscles in your abdomen, back, and legs. It should include exercises to improve your balance and agility (ability to move with ease), strengthen your muscles, and improve neuromuscular control or "muscle memory" (training your muscles to move in healthy patterns). Exercises can also include those directed specifically towards the joint itself, range of motion and stretches to maintain or improve mobility and muscle strength. Your physiotherapist will provide you with guidance to perform these exercises properly, safely and progress when it is indicated. Physiotherapy is available through private clinics or publicly funded for those over 65 years of age.

Group exercise has also been shown to be effective in improving function and mobility. There are specific programs offered in the region for arthritis, including these some free programs.

# **Bracing (for Knee Osteoarthritis)**

There is evidence that bracing may decrease joint pain and stiffness, increase function and reduce instability in knee osteoarthritis. There are many options available through various resources in the community. A brace can be a simple sleeve or a complex custom moulded unloading brace. Generally, the more supportive the brace (i.e. hinges, unloader, custom fitted), the more improvement it can provide, however evidence suggests than any knee brace is beneficial. Braces can be found at a variety of locations, but custom braces need to be measured and fit to your knee. Many insurance plans will cover the cost of a brace.



# **Mobility Aids and Assistive Devices**

A cane, walker or walking poles are all examples of mobility aids which can help unload your sore joint. They must be properly fitted and ensure that the cane is used on the opposite side. Adequate supportive footwear is also important to reduce the impact forces during weight bearing. Proper footwear should have good arch support and shock absorption (gel or silicone insoles). Certain foot and ankle problems or evidence of leg length discrepancy may benefit from custom orthotics. A health care professional can advise when this is appropriate. Assistive devices such as a raised toilet seat, shower chairs, grab bars, a reacher and sock aids are devices to help you carry out your daily tasks more efficiently.

# **Cryotherapy (Cold) and Thermotherapy (Heat)**

Use of heat and cold are two of the simplest, most readily available and least expensive methods of symptom management.

## Cold

- Use cold when the joint is acutely inflamed or flared up.
- You can use gel ice packs, frozen veggies or ice cubes in a bag.
- Be sure to have a layer, such as a dish towel, between the ice and your skin.

#### Heat

- Use heat when your joint feels stiff and achy.
- Heat can be in the form of a heating pack, warm shower/bath or whirlpool.

Use cold or heat for 10-15 minutes. There are precautions to using heat and cold with certain medical conditions. Talk to your healthcare provider if you have concerns.

# **Pharmacological Management**

Pharmacological management of OA includes oral (by mouth) and topical (cream) medications. There are some medicines which can be injected into the joint. These can be divided into overthe-counter and prescription medications. In selecting pain relieving medications, a stepped approach should be employed with the easiest and lowest risk options tried first.

The recommended first line of treatment of pain is topical non-steroidal anti-inflammatory drugs

(NSAIDs) such as Voltaren Emugel. These are generally well tolerated by patients and have lower risk of side effects than oral NSAIDs. Acetaminophen (Tylenol) in combination with the topical NSAIDs may provide additional pain relief.

When acetaminophen and topical NSAIDs are ineffective for pain relief your healthcare professional may suggest adding oral NSAIDs. These can be over the counter or prescription. Over the counter NSAIDs include ibuprofen (Advil) and naproxen (Aleve). Prescription NSAIDs include Celebrex, Diclofenac and Meloxicam. There may be adverse effects on the gastrointestinal, cardiovascular and renal systems with oral NSAIDs. It is advisable to talk with your health care provider or pharmacist to best ascertain which would be the most suitable for you and to determine the appropriate dosage and usage.

The Arthritis Society is funding research into the use of cannabis. At this time there are many unknowns and there are no formal guidelines regarding the use of cannabis for OA.

You should also make a plan to review your use of medication after a certain time with your primary health care provider. You should not take opioid medication, such as oxycodone or Percocet, as a routine means of treating your osteoarthritis pain. These drugs have serious risks including addiction, overdose and death.

Therapeutic intra articular injection includes corticosteroid injection and viscosupplementation (e.g NeoVisc, SynVisc and Durolane). Corticosteroid injections have been shown to provide short term relief of pain and stiffness as well as improve function, especially if your knee is very swollen or acutely inflammed. Injections are generally tolerated well and do not have the adverse effects associated with oral NSAIDs. There is varying evidence for viscosupplementation injections (hyaluronic acid), meaning that the research doesn't show if there is a benefit to patients or not. There is currently no evidence to support PRP or stem cell injections in management of osteoarthritis.

## **Use of Supplements**

Although many people consider supplements to be natural products, be aware that anything you take may interact with other medications or health conditions in a negative way. Speak to your physician or pharmacist. When trying a supplement it is suggested to try it for 6 weeks, and then try without it for 6 weeks to help determine if it was helpful.

#### Glucosamine/chondroitin

Glucosamine and chondroitin are components that help make up cartilage, the tissue that cushions your joints. Large studies on glucosamine and knee OA have had conflicting results— some say it helps, others say it has little or no effect.

#### Omega-3s/fish oil

Omega-3 fatty acids have shown some reduction in pain and inflammation.

#### Avocado soybean unsaponifiables (ASU)

This natural vegetable extract is derived from avocados and soybeans. It may help lessen the pain and stiffness of OA in the knee and hip.

#### Turmeric

Turmeric is a bright yellow spice and its primary ingredients are called curcuminoids. Early research suggests that curcuminoids may help control knee pain from OA.

#### Methylsulfonylmethane (MSM)

Studies have not found evidence that MSM significantly reduces arthritis pain.

# **Resources for Managing Your Osteoarthritis**

# Arthritis Society www.arthritis.ca

## <u>519.743.4141</u>

- Arthritis Self Management Program
- Arthritis Rehabilitation and Education Program (AREP)
- Stay Active- Living Well with Hip or Knee Osteoarthritis workshop
- Flourish is the information section of the website with information, exercise videos,

advice and strategies: https://arthritis.ca/living-well

## **Physiotherapy Services**

There are several ways to find a physiotherapist near you.

#### Ocean Health Map www.OceanHealthMap.ca

Type Physiotherapy in the Search Field, and then enter your city or address.

**College of Physiotherapists** https://portal.collegept.org/public-register/# You can also find a list of physiotherapists in your city by searching the College of Physiotherapists Website: Find a Physiotherapist. Type in your city name. On the next page, filter the results (left side of page) and select Orthopedics

For individuals over age 65, you are eligible to receive OHIP covered physiotherapy at specific locations if referred by your physician.

## **GLA:D® Canada**

Gla:d is an 8 week education and exercise program for those with stiff or painful hips and/or knees due to osteoarthritis.

To find a program near you, including some virtual options, visit:

https://gladcanada.ca/index.php/find-nearest-glad/

# SMART Exercise Classes/Balance/Gentle exercise

Currently offered virtually

https://communitysupportconnections.org/physical-health/



# Waterloo-Wellington Self Management Program

Learn how to improve the quality of your life through one of our workshops that are offered throughout the Waterloo Wellington area. These FREE workshops for adults are highly interactive, provide peer support and give you the tools to take action and put your health back in your hands.

Topics include physical activity and healthy eating, dealing with difficult emotions, managing symptoms, better sleep, improved communication skills and changing your relationship with food.

For more information phone 1-866-337-3318 or visit us online at <u>http://www.wwselfmanagement.ca</u>

# Weight Management

Call **Telehealth Ontario** at 1-866-797-0000 to speak with a dietitian for free, evidence-based nutrition and healthy eating information.

**Craving Change**<sub>TM</sub> is a free, 4-week workshop series focusing on helping you to change your relationship with food. "Change your thinking, change your eating." Contact Waterloo Wellington Self Management at 1-866-337-3318 or your Family Health Team.

Dietitians of Canada provide a variety of resources, videos, tips, meal planning <a href="http://www.cookspiration.com/menuplanner.aspx">http://www.cookspiration.com/menuplanner.aspx</a>

#### Private pay programs include:

Taking Off Pounds Sensibly (TOPS) http://www.tops.org Weight Watchers https://www.weightwatchers.com/ca/en