# 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 sometimes called degenerative joint disease or "wear and tear" arthritis. OA affects the entire joint causing structural changes such as cartilage breakdown, bone reshaping and joint inflammation. 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.

There are factors that contribute to developing OA. Factors such as age, gender and genetics cannot be changed. Contributing factors 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 strategies include therapeutic exercise, physical activity, weight management, assistive devices, cryotherapy and thermotherapy.

# **Physical Activity**

It is important to be physically active every day. 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. There are many resources available in community that will help you reach your goals. Your physiotherapist will give you information on the resources.

### Weight Management

Being overweight can make joint pain and mobility worse. Losing weight 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 other 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 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 Stay Active (by the Arthritis Society), GLA:D programs (exercise specifically for osteoarthritis), or Gentle Exercise Classes. Many are free of charge.

# **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 neoprene sleeve or as complex as a custom moulded unloading brace. Generally the more supportive the brace (i.e. hinges, unloader, custom fitted), the more improvement it can provide. These can range in price from less than one hundred dollars up to several thousand dollars. 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 prove beneficial to reduce forces on the affected 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 and topical medications and intra-articular injections. These can be divided into over-the-counter and prescription medications. In selecting pain relieving medications, a stepped approach should be employed.

The recommended first line of treatment of pain is topical non-steroidal anti-inflammatory drugs (NSAIDs) such as Voltaren Emugel. These are 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.

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. Injections are generally tolerated well and do not have the adverse effects associated with oral NSAIDs. The evidence for viscosupplementation injections is inconclusive, meaning that the research doesn't show if there is a benefit to patients or not.

# **Resources for Managing Your Osteoarthritis**

The Arthritis Society



#### www.arthritis.ca

1-800-321-1433

- Arthritis Self Management Program
- Free workshop "Stay Active"
- The Arthritis Rehabilitation & Education Program
- The website has extensive information.

#### Caredove

Caredove is an online directory that includes a wide variety of resources for people who have osteoarthritis (as well as other conditions). The Waterloo Wellington Chronic Disease Prevention and Management section includes helpful resources in this area. Most of the resources listed below can also be found through Caredove.

https://www.caredove.com/wwcdpm

### **Physical Activity and Therapeutic Exercise**

#### **GLA:D Canada**



#### www.qladcanada.ca

The GLA:D program is an 8 week education and exercise program for those diagnosed with hip or knee arthritis. The program is offered for free at YMCAs in the region, by Community Support Connections or VON. Advanced registration is required.

A.R. Kaufman YMCA Kitchener
Cambridge YMCA
Tues/Thurs 830-10am and 1030-12pm;
Tues/Thurs 215-345pm and 4-530pm;
Tues/Thurs 1:30, 3 pm

For Kitchonor and Cambridge: Please call 510-772-8787 v228 to regis

For Kitchener and Cambridge: Please call 519-772-8787 x228 to register. For Guelph: Please call Kelly Gee at VON at 519-323-2330 to register.

Members of the Minto Mapleton Family Health Team can also contact their physician's office about the program offered by their Family Health Team.

The GLA:D program is also offered by some private clinics where there would be a cost associated.

#### **SMART Gentle Exercise Classes**

www.communitysupportconnections.org http://www.von.ca/en/waterloo/service/seniors-maintaining-active-roles-together-smart

This program is offered by the Ontario government free of charge and no registration is required. Classes are 45 minutes of group gentle exercises, 2-3 days a week in community settings.

# **Physiotherapy Services**

#### https://www.caredove.com/wwrehab

Click "Exercise and Activation" or "Therapy Disciplines-Physiotherapy" Click "Physiotherapy, then MSK Clinic" and search your city or address for a list of physiotherapy clinics in the area.

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. <a href="https://portal.collegept.org/public-register/#">https://portal.collegept.org/public-register/#</a>

# **Waterloo-Wellington Self Management Program**

http://www.wwselfmanagement.ca/ 1-866-337-3318 or 519-947-1000 ext 255

### **Weight Management**

Eat Right Ontario: Call Telehealth 1-866-797-0000 and you will be connected with a registered dietician

Dietitians of Canada provide a variety of resources, videos, tips, meal planning <a href="https://www.dietitians.ca/Your-Health.aspx">https://www.dietitians.ca/Your-Health.aspx</a>

http://www.unlockfood.ca/en/default.aspx

### Private pay programs include:

Taking Off Pounds Sensibly (TOPS) <a href="http://www.tops.org/tops/tops/default.aspx?websitekey=a56ba4c3-a91c-4d57-b04a-b38d910feec5">http://www.tops.org/tops/tops/default.aspx?websitekey=a56ba4c3-a91c-4d57-b04a-b38d910feec5</a>

Weight Watchers <a href="https://www.weightwatchers.com/ca/en">https://www.weightwatchers.com/ca/en</a>