

MANAGEMENT OF HIP AND KNEE OSTEOARTHRITIS

Osteoarthritis (OA) is a chronic condition resulting from the loss of cartilage in the joint. The joint cartilage provides smooth and pain-free joint movement, and as it becomes deficient the joint becomes stiff and painful. Over time the pain often fluctuates, with good days and bad days, and intermittent flare-ups that may last for days or weeks. Over the longer term pain tends to increase and function deteriorates.

LIFESTYLE MODIFICATIONS

Pain from OA typically gets worse with increasing levels of activity. Reducing excessive weight-bearing activity, especially on uneven or unpredictable surfaces, and eliminating impact activities such as running, will often result in reduced pain and improved overall function. It is important, however, to remain as active as reasonably possible. Walking at least short distances regularly is important in helping to maintaining joint function.

WEIGHT REDUCTION

Maintain an appropriate weight for your height. Excessive weight overloads joints that are already wearing out. Your Body Mass Index is calculated by dividing your weight (in kg) by the square of your height (in metres), and should be between 20 and 25. A 5'9" (1.75m) tall person should thus weigh between 61kg and 76kg. Ascending a step puts five times your body weight across the front of the knee; losing even a small amount of weight can make a big difference.

BRACES

Simple elastic knee braces may help to control swelling and may help with knee function. Special hinged knee braces are not usually helpful. Hip OA is not usually helped by bracing.

PHYSIOTHERAPY

Physiotherapy is important to maintain joint mobility and muscle strength. A physiotherapist will also be able to help you walk as efficiently as possible, helping you to

maintain mobility and independence in the setting of OA. Many patients with OA also find hydrotherapy beneficial. Some patients find heat or ice packs helpful; you should use whatever works for you.

WALKING AIDS

A walking stick may help you to maintain your mobility, but if you require a walking stick for hip or knee pain, surgery is probably worth considering. If you do use a walking stick you should use it in the hand opposite to the side of your hip or knee pain.

DIET

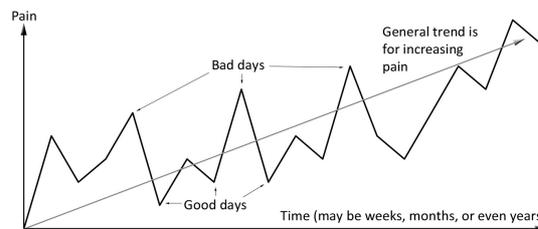
You should ensure you eat a healthy and well balanced diet, including drinking plenty of water. This will not only help to achieve and maintain a healthy weight, but will help ensure that you get adequate nutrition and fluid for your joints. Many people find foods with natural anti-inflammatory properties like ginger or turmeric helpful.

MEDICATIONS

PAINKILLERS

YOU SHOULD TAKE A SIMPLE ANALGESIC SUCH AS PARACETEMOL (eg. Panadol-Osteo) REGULARLY, WHETHER YOU HAVE A LOT OR ONLY A LITTLE PAIN. Even if you feel it is not helping very much it will almost certainly reduce your requirement for stronger painkillers. Paracetamol has very few side effects.

PANADIENE and PANADIENE-FORTE combine paracetamol with codeine. Codeine is a powerful painkiller, but not everyone can convert it to its active ingredient. Codeine causes constipation, and may make you drowsy. While I do not recommend taking these medications regularly, they may be used occasionally instead of (but not in addition to) simple paracetamol.



ANTI-INFLAMMATORY MEDICATIONS (Non-Steroidal Anti-Inflammatories; NSAIDs) are usually effective at reducing the pain from OA. These medications (eg Neurofen) can have side effects including stomach ulcers and kidney problems. Some NSAIDs (eg Mobic) may be less likely to cause some side effects than other NSAIDs. You should talk to your family doctor before you take an anti-inflammatory medication on a regular basis.

TRAMADOL is a strong painkiller. It requires a prescription from your family doctor as it does not agree with everyone, and can interact with other commonly prescribed medications. I recommend it be used only as a last resort, and not usually on a regular basis.

OXYCONTIN and OXYCODONE (Endone) are narcotic-like (morphine-like) medications. They are very powerful painkillers that may be used for short periods after surgery. If taken for long periods they can result in tolerance, so that higher doses are required to achieve the same effect. This can reduce their effectiveness when they are required after surgery, making post-operative pain difficult to control. They can be also addictive if used inappropriately. I do not recommend these medications be used to control pain caused by OA.

GLUCOSAMINE, FISH OILS and GREEN-LIPPED MUSSEL EXTRACT are all oral supplements that are marketed as a way of managing OA. Independent studies have not shown as promising results as those sponsored by companies that sell these products, although some patients do report improved joint function. While I do not recommend for or against these dietary supplements, there are few side effects and I do not discourage you from trying them to see if they will help you.

INJECTIONS

Injections may be used in the treatment of knee OA. An injection may be used as a diagnostic tool in the setting of possible hip OA, but injections are not usually recommended as a treatment for hip OA. There is presently inadequate evidence to support the use of experimental injections aimed at cartilage regeneration.

CORTICOSTEROID injections reduce inflammation and pain and may temporarily improve knee function.

HYALURONIC ACID (Synvisc) may improve knee function for 3 – 12 months in some patients. Costs is between \$400 to \$600. Results can be unpredictable with some patients unexpectedly getting little benefit.

PLATELET RICH PLASMA (PRP) injections may improve knee function for up to six months in up to 80% of patients with mild knee arthritis. A series of three ultrasound guided PRP injections costs around \$1200.

ARTHROSCOPY

Arthroscopy is a very effective treatment for meniscal tears in a knee without OA. Arthroscopy may be helpful in the setting of a meniscal tear with mild OA, but arthroscopy will not usually improve arthritic pain. In young patients with severe OA an arthroscopy may improve joint function (but not necessarily pain) and may help to delay joint replacement surgery. Although arthroscopy can be a useful diagnostic tool in the planning of knee replacement surgery, I do not usually recommend arthroscopy as a treatment for older patients with end-stage OA. Hip arthroscopy is not recommended as a treatment for hip OA.

RE-ALIGNMENT OSTEOTOMY

By cutting and re-aligning one of the bones around the knee the forces through the knee can be redirected away from worn cartilage and toward intact cartilage. These procedures are usually reserved for selected younger patients who wish to maintain relatively high function and are prepared to tolerate some residual pain.

JOINT REPLACEMENT

UNICOMPARTMENTAL KNEE REPLACEMENT (UKR)

In selected patients it is possible to achieve a pain-free knee joint by only replacing part of the knee. Although patients who have a good result from this surgery may be more satisfied with their knee than those with a total knee replacement, the results of UKR are less predictable than for total knee replacement, and revision surgery is more likely with UKR than with total knee replacement.

TOTAL JOINT REPLACEMENT

Total joint replacement involves replacing the weight-bearing joint cartilage with a synthetic joint typically made of metal (usually a cobalt-chrome alloy) and plastic (usually a tough polyethylene). Although it is the last resort in the management of OA the results of total joint replacement are predictable and are very good.

Over 90% of joint replacements last more than ten years. Patients tend to be more satisfied with hip replacements than with knee replacements. Total joint replacement has allowed many thousands of people with OA to maintain their mobility and independence.

