

## **How to Avoid and When to Enjoy a Total Knee Replacement**

(Treatment Options for Osteoarthritis of the Knees)

Degenerative, or osteo- arthritis of the knees is a condition in which the cartilage of the joint is worn away and roughened so that the joint does not run smoothly. The roughened cartilage surfaces can wear away down to bone in more severe cases. This wearing away of cartilage can be very painful and can cause stiffness, swelling, and a limp. The pain can be a result of inflammation from debris within the joint, increased pressure on underlying bone, microscopic fractures of the bones, loss of blood supply to hardened bone, bone spurs stretching ligaments and nerves, or muscle spasm.

Ultimately, the only "cure" for severe degenerative arthritis of the knees is a total knee replacement. Although knee replacement surgery alleviates the pain of osteoarthritis and leaves most patients extremely happy with their knees, it requires a great deal of work through rehabilitation to achieve this goal. For this reason it is extremely important that you have exhausted other treatment options and are mentally ready to undergo this surgery. It is important to note that while osteoarthritis is not life threatening, it is "quality of life" threatening. When you can no longer function in life without disabling pain, it may be time to consider surgery.

This sheet will outline many of the treatment options that are available for you to try short of knee replacement surgery. It will also outline other surgical treatments that might be available to you depending upon your age and the severity of your arthritis. Your surgeon can further discuss these surgical options with you.

### **Over the Counter Medications**

The following medications are available over the counter and should be tried for a period of about 4 weeks before you decide if they are of any benefit.

- Tylenol- take according to directions for relief of pain.
- Aspirin, Ibuprofen, Advil, Aleve, Ketoprofen - These are over-the-counter non-steroidal anti-inflammatory medications that can be taken to reduce the inflammation and pain of arthritis.
- Glucosamine and Chondroitin sulfate - These two substances are the "building-blocks" of cartilage and when taken as a nutritional supplement can increase the health of the cartilage. It is recommended that you take 1500mg. per day. We recommend that you try this for a period of about two months before deciding whether it is of benefit to you. You may not realize that it is helping you until you stop taking it. If your pain increases after discontinuing this supplement, you may want to resume taking it.

### **Anti-inflammatory Medications**

These medications are dispensed with only by prescription and are divided into two types:

- Traditional NSAIDS - such as Naprosyn, Voltaren, Daypro, Relafen, and others.
- Cox-2 Inhibitors - a newer class of medications such as Celebrex or Mobic. These medications have fewer side effects than traditional NSAIDS, but are also more expensive.

### **Topical Medications**

These substances are absorbed thru the skin and can help decrease the pain of osteoarthritis.

- Capsaicin Cream - This is a "hot pepper" cream that is rubbed into the skin of your knees. Make sure that you wash your hands after application, and do not touch your eyes or mucous membranes with your fingers as it will burn these areas.
- Lidoderm patches - These are available only with a prescription and deliver a safe amount of lidocaine (numbing medication) thru the skin. They are to be worn for a period of twelve hours and then removed for the next twelve hours. This treatment can be repeated daily during an arthritic flare.
- Voltaren Gel - This is available only with a prescription. It contains Voltaren (diclofenac sodium) It should not be applied to open areas on the skin or where other topical medications are applied. Make sure that you wash your hands after application, and do not touch your eyes or mucous membranes with your fingers.
- Pennsaid - This is available only with a prescription. It contains Voltaren (diclofenac sodium) It should not be applied to open areas on the skin or where other topical medications are applied. Make sure that you wash your hands after application, and do not touch your eyes or mucous membranes with your fingers.

### **Physical Treatments**

1. Exercise - is a vital part of osteoarthritis management. The right type of exercise will benefit your painful joints and help maintain your overall health. Your exercise program should include some form of aerobic exercise (such as walking, biking, swimming, or aerobic exercise machines) that is comfortable for you as well as some specific exercises to strengthen the muscles that support your knees.

During times of increased pain from an arthritic flare, you should limit your exercise to gentle range of motion, isometrics to maintain muscle tone, or aquatherapy (giving you the benefit of buoyancy, placing less stress on the knees.)

\*See the specific exercises suggested on our Exercise for Osteoarthritis handout.

2. Heat or ice - either one of these modalities may be helpful in alleviating your pain.
3. Weight loss - this can be helpful in prolonging the life of your knee.

4. Assistive devices - such as a cane or walker can help to relieve the pain of bearing weight on your knee.
5. Braces - there are many types of braces available, some of which may or may not be covered by insurance. You may want to try an ace wrap or an elastic bandage for support and warmth for your knee. These are available over the counter at the drug store. There are more elaborate braces that can be obtained from a brace company if your doctor feels one of these might help you.
6. Shoe inserts - you may want to try a special heel wedge in your shoe. The purpose of this is to help change the alignment of your leg to take some of the pressure off of the arthritic area of your knee.

### **Injections**

- Cortizone injections - this is best used for acute arthritic flares. It can be repeated for a total of 3 per year.
- Synvisc or Hyalgan injections - joint lubricant that is given in a series of 3 or 5 weekly injections and can be repeated every 6 months if allowed by your insurance.

### **Surgical Options**

1. Arthroscopy - to "clean out" the joint and smooth some of the roughened joint surfaces.
2. Arthroscopy and cartilage transfer procedures - to fill in small areas of missing cartilage with cartilage transferred from other areas of your knee. Only certain cartilage defects are amenable to being fixed in this manner.
3. Open surgical procedures
  - Unicompartmental spacer
  - Unicompartmental joint replacement
  - Osteotomy
  - Total joint replacement

Your doctor will discuss these various surgical procedures with you when you are a good candidate.