

Total Joint Replacement

General background:

Joint replacement of the hip and knee is performed for advanced arthritis. Arthritis refers to the breakdown of cartilage - the smooth tissue that lines these joints and allows for painless function. The loss of cartilage generally leads to decreased motion, diminished activity, and pain. While many separate diseases may lead to arthritis, the most common cause is mechanical wear-and-tear that occurs with aging. This is referred to as osteoarthritis. Many patients with arthritis obtain significant benefit from non-operative treatments. When these measures fail to alleviate pain and restore function, surgery becomes a consideration.

Non-operative treatment for arthritis:

There are many non-operative treatments for arthritis that may be helpful in controlling pain and maintaining function. While none of these “fix” or replace the lost cartilage, they may provide enough relief to keep people healthy and active without surgery.

Exercise: A regular routine of low-impact exercise can be instrumental in maintaining function and helping people feel better. It is important that low-impact exercises are chosen to minimize the forces placed across joints. Stationary cycling, swimming, aqua-aerobics, and elliptical machine are good choices to decrease the possibility of exacerbating joint pain with exercise.

Maintaining a Healthy Body Weight: Arthritis-related pain of the hip, and particularly the knee, can be worsened by excessive weight. Maintaining a healthy body weight is an excellent long-term strategy for joint longevity and function. This often requires a combination of diet and low-impact exercise and can make a big difference in the pain experienced with arthritis.

Medications:

- Anti-inflammatory medications also called NSAIDS (e.g. Motrin, Ibuprofen, Alleve, Naprosyn, Diclofenac, Voltaren, etc.) are often helpful in reducing the dull, achy pain caused by arthritis. While these medications can cause gastrointestinal side effects and are not appropriate in some people with kidney conditions, they may provide significant relief. These medicines work to combat the inflammation that accompanies arthritis.
- Glucosamine and Chondroitin Sulfate are oral supplements thought to be involved with control of joint metabolism and repair and maintenance of cartilage. Though conflicting studies exist in the literature, these agents may be beneficial for arthritis.
- DMSO (Dimethyl Sulfoxide) is a topical antioxidant that may have anti-inflammatory properties.
- Narcotic pain medications are generally not recommended for arthritic conditions, and especially not as a first-line or long-term treatment option.

Ambulatory Aids:

Trekking poles, a cane, or a walker can all be utilized to improve ambulation. These help offload the arthritic joint thereby relieving pain and improving function.

Complementary and Alternative Medicine Options:

Certain treatments that were once considered unconventional have been recognized as potentially having a role in the treatment of arthritis. These include:

- Acupuncture
- Hypnosis
- Heat and cold therapy
- Meditation
- Massage
- Neuromuscular electrical stimulation

Injection Therapy: There are two main categories of injection therapy that can be helpful for arthritis. These include corticosteroid and viscosupplementation injections.

- Corticosteroid or “steroid” injections work to decrease the inflammation and pain of the arthritis process. This medication is injected directly into the arthritic joint. While this doesn’t “fix” the problem, it may be helpful for a variable period of time, usually weeks or short months. This type of injection is commonly performed for the knee and occasionally performed for the hip.
- Viscosupplementation injections are composed of hyaluronic acid and are also injected directly into the arthritic joint. There are many different trade names for these: Orthovisc, Synvisc, Euflexxa, Supartz, and Hyalgan. These work in a variety of ways including: as an anti-inflammatory, decreasing enzymes that degrade cartilage, providing lubrication and increased viscosity to the joint fluid, and reducing pain induction in the joint. These injections may have a longer duration of activity than a corticosteroid injection. However, they do not “fix” the arthritic process. They are approved only for the knee joint at this time.

Physical Therapy:

For cases of mild arthritis, physical therapy may be helpful in strengthening muscles that serve as dynamic stabilizers of a particular joint. Physical therapy probably has a limited role for moderate and severe arthritis as the increased stress and motion on the damaged joint may cause an exacerbation of pain. In certain cases, however, pre-operative physical therapy may be very useful for strengthening the muscles in the lower extremity, thus providing for a smoother post-surgical rehabilitation. This sort of therapy should be closely directed by a physical therapist.