



Arthritis of the Knee

Arthroscopic Therapy

Arthritis of the knee is a complex subject because its causes are multiple and often very slow in onset.

Arthritis of course is much more prevalent in older age groups, but normal wear and tear due to every day use has not been proven as a causative factor in the arthritis of the knee that we see.

It is recognized that injury to the knee from either significant impact or multiple repetitive injury over a period of many years can lead to arthritis changes.

Multiple or repetitive injury to the interior aspect of the knee joint, that is the articular cartilage (which is different from the meniscus) can occur from many different situations. Sometimes the knee is not aligned properly and there is too much stress on one side or the other. In other situations, the knee might be somewhat unstable following disruption of a knee ligament. Injuries to the meniscus (shock absorber) can in some cases eventually lead to arthritis changes in the knee.

Single impact injuries which do not actually produce any bone damage, yet are significant enough to harm the surface of the joint (articular cartilage), expose this tissue to enzymatic activity leading to softening and eventual shedding of cells into the joint cavity.

The role of arthroscopic surgery in the treatment of arthritis of the knee should be thought of in two ways. The first would be prevention of the development of arthritis by repairing a torn meniscus for example, which hopefully would prevent degenerative arthritis in the future. Some reduction in the incidence of arthritis of the knee seems to be possible by repairing the torn meniscus rather than removing it if possible.

The data on early anterior cruciate ligament reconstruction as a means to preventing arthritis of the knee in the future has not been available long enough to prove conclusively that ACL reconstructions do prevent arthritis in the knee in future years.

Arthroscopic treatment of established arthritis in the knee takes several different forms. It depends on the stage of arthritis changes in the knee that are found at the time of arthroscopic surgery.

Certainly everyone whose knee hurts should not be subjected to arthroscopic surgery. While it is also true that everyone whose knee hurts does not need MRI evaluation of the knee, it is often suggested and carried out before surgery is recommended. Personally, I feel the MRI study helps me learn as much as I can about the knee before recommending surgery (if that be the best course for a particular patient) and also in knowing some things about the knee that I cannot even learn when I do the arthroscopic procedure. It is like having a road map before you go on a trip.

Arthroscopic surgery for treatment of the knee is much more effective in the earlier stages of arthritis rather than later. When the surface covering of the joint is worn away and the bone is peeking through, arthroscopic surgery is not going to be very effective.

Some feel that cleaning up the joint arthroscopically encourages a repair response in the joint increasing the synthesis of matrix and cell proliferation. We believe this to be complementary to the beneficial effects of taking nutraceutical supplements such as Glucosamine and Chondroitin. (see Online Orthopaedics related articles pertaining to Glucosamine and Chondroitin).

There are more sophisticated techniques arthroscopically for the encouragement of fibrocartilage



Online Orthopaedics

Medical Article



tissue growing into defects in the knee joint. While these techniques are available they have a somewhat limited application and their description is really beyond the scope of this article. They would be one step away from a total joint replacement.

If the joint is too worn out and has reached so called stage four disease it would be equivalent to losing most of the tread on the tire of your car.

There are certainly some limitations to imaging techniques such as plain x-rays and MRI in the evaluation of knee joint arthritis. Arthroscopic surgery, when it is done, gives a much clearer picture of what is in process in the knee and what appropriate treatment should be at that time and in the future.

When pain in the knee is the primary problem and is moderate to severe and the person does not choose to proceed with more major surgery such as a total knee replacement, then sometimes it is beneficial to relieve pain with the injection of lubrication substances (Viscosupplementation) such as Hyalgan and Synvisc (see related Online Orthopaedics Library articles).



Online Orthopaedics

Thank you for using the Online Orthopaedics Library.

We hope it was useful to you. Please check back frequently because new topics and information are being added continuously by Dr. Haverbush.

Please feel free to print, download, and use/distribute this information (as long as you are not reselling it in any form). Remember, it is the property of Online Orthopaedics and we retain all rights regarding its content. Alteration of this document in any way is a violation of the copyright.

This material does not constitute medical advice. It is intended for informational purposes only. No one associated with Online Orthopaedics will answer medical questions via email.

Please consult Dr. Haverbush or a physician for specific treatment recommendations.

Thomas J. Haverbush, MD. P.C.

Office Address:

315 E. Warwick Dr., Suite A

Alma, Michigan 48801

989-463-6092

Fax 989-463-8914

Website Address:

www.orthopodsurgeon.com