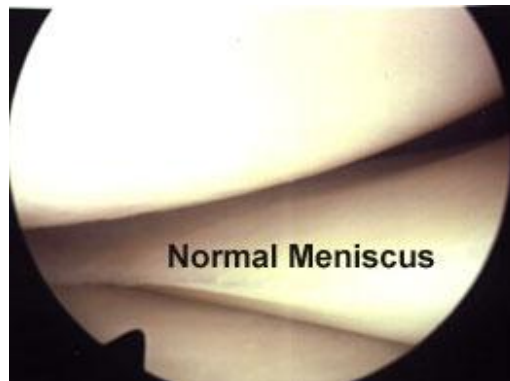




The Torn Meniscus - or is it Torn Cartilage?



Most orthopaedic surgeons, including myself, would like to give a piece of their mind to the person or persons who started calling the meniscus "the cartilage." The meniscus should not be referred to as cartilage. Cartilage is an entirely different structure which covers the ends of our bones that have a gliding surface. It is an extremely complex structure which is still studied extensively, even today, to understand its complete structure and properties.

The meniscus is a wedge-shaped shock absorber structure in the knee joint. There is a medial meniscus on the inner side of the knee and a lateral meniscus which is positioned on the outer, or lateral, aspect of the knee. They differ somewhat in shape - the medial meniscus being more C-shaped in appearance looking at it from above, and the lateral meniscus being more O-shaped.

The menisci in themselves are very complicated structures, as well, but not as complicated as the articular cartilage. They are very tough and resilient structures which truly act as shock absorbers and stabilizers for the knee joint. The menisci are attached at their outer margin which is the thickest portion of the meniscus, and then they taper inward to a very thin inner edge which is deeper in the knee joint. The structure, therefore, is somewhat like a wedge or shaped like a V. The menisci contact both the tibial articular surface of the knee as well as the femoral. They rotate and glide and move in the knee but they are attached on their outer surface to the knee joint capsule. It is not our purpose here to give a total anatomical description of the meniscus.

They are extremely important structures in the knee which contribute to the stability of the knee and reduce wear in the knee joint.

Menisci undergo wear and tear changes just like every other part of the human body. Gradual wear and tear changes in the meniscus can lead to damage caused by a very minimal amount of trauma. Tears in the menisci take many forms and it would be too complex to recount all of these for this article. Suffice it to say that the meniscus is usually damaged because it has previously undergone some degree of degenerative change. This could be present in someone who is even in their 20's. However, sometimes even seemingly healthy menisci are torn if they are trapped or pinched in the knee in just a certain way to cause the meniscus to split or tear.

These damage changes to the meniscus are usually reflected in symptoms that the



patient very soon begins to appreciate. Pain is the most common symptom. It is usually, but not invariably, located on the side of the torn meniscus. Swelling is sometimes a symptom but not as frequently as pain. The knee often will click or catch or seem unreliable and as patients usually describe it, "give way." Sometimes a torn meniscus can be identified on examination by the orthopaedic surgeon. Other times the diagnosis can be elusive and since the advent of MRI studies of the knee, our ability to diagnose torn menisci has increased dramatically. However, sometimes menisci can actually be torn and this will not be demonstrated on the MRI. Conversely, sometimes the MRI indicates that a meniscus is torn and it is not found at the time of surgery.

When I first started in practice after leaving my residency, no one was too concerned about surgically removing a torn meniscus. Frequently we tried to remove as much of the torn meniscus as possible. It was also thought that some of the meniscus would re-grow or regenerate after a substantial portion of it was removed. When arthroscopic surgery became more widely used, it was quickly understood that a torn meniscus never re-grows or regenerates. But, at that point in time MRI studies were not available and so the misconception of regenerated menisci persisted for a long time.

Since most torn menisci are treated with arthroscopic surgery, in more recent years the trend has been to remove what is torn or damaged and try to leave as much of the good meniscus as possible. Techniques have even been developed to save as much of the meniscus as possible by repairing it in a variety of ways. This field of research continues to evolve and change frequently. However, a repaired meniscus does not always work and it is not unusual to have to re-operate for removal of a portion of the meniscus that was attempted to be repaired and saved and did not heal back together as planned.

Arthroscopic meniscus surgery is almost always done as an outpatient at this point in time. A period of crutches and partial weight bearing as well as a much more extended period of rehab exercises are what have worked the best in our hands for treatment of a torn meniscus.

It is a very interesting subject about which much is written and it is not intended that this be a definitive discussion of the subject.

More information is available at the American Academy of Orthopaedic Surgeons, www.aaos.org.



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