STEVEN CHUDIK MD SHOULDER, KNEE & SPORTS MEDICINE

Meniscus Repair versus Partial Menisectomy

Indications for Surgery

Surgery is indicated for people who have symptomatic tears of the meniscus. Meniscal tears can cause pain in the knee as well as mechanical symptoms including locking, catching, intermittent sharp pains, and sometimes even giving way.

Only the outer 10 to 30 percent of the meniscus has a blood supply that is required to allow tissues to heal. Because of this limited blood supply and limited ability to heal and repair itself, the meniscus tends to develop degenerative tears (from "wear and tear") over time. The majority of meniscal tears are generally degenerative but sometimes a single injury can suddenly extend a developing tear, causing it to become symptomatic (painful). Unfortunately, because of the instability (movement) of the torn fragment of the meniscus and its limited blood supply, meniscal tears generally do not heal or regenerate themselves. Also, because of this limited blood supply and the fact that a majority of tears are degenerative in nature ("beatup" without clean edges that can be sewn together), most meniscal tears cannot be repaired and require an arthroscopic partial menisectomy (removal of the torn and damaged portion of the meniscus) to relieve symptoms. A small number of meniscal tears that occur after an injury (especially an ACL injury) are simple vertical (clean) tears in the outer area of the meniscus which has a good blood supply. This type of tear may heal if surgically repaired (sewn back together). Meniscus repairs are performed arthroscopically (using a small camera that allows Dr. Chudik to look inside the knee through small incisions), but often requires a small open incision to protect nerves and blood vessels around the knee as the needles and suture are passed through the tissues to repair the meniscus.

The success of meniscus repair (healing of the tear) is significantly higher in stable knees with an intact anterior cruciate ligament (ACL). Thus, it is advisable to reconstruct an ACL tear in patients with combined ACL tear and a reparable meniscus tear to increase the chances for the meniscus to heal. The age of the patient appears to have little effect on the healing rate of a repair.

Because the meniscus is a part of the weight-bearing surface of the knee joint, a meniscus tear often represents an early but significant sign that the knee is wearing and tearing. It is often one of the first steps in the development of arthritis, the clinical scenario when the weight-bearing surface of the joint (cartilage and meniscus) is worn out and causing pain, swelling and stiffness. The meniscus is important to help distribute forces across the knee joint. Injury or loss of functioning meniscus (whether removed or not) is associated with increased loading of the





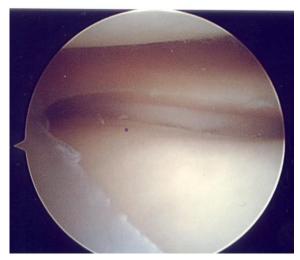
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cartilage in that same area of the knee and increases the risk for the early development of arthritis of the knee joint. Thus, the goal of meniscal surgery is to eliminate the symptoms in your knee by either repairing it or removing only the torn and damaged portion of the meniscus.

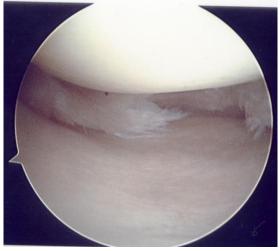
Arthroscopically removing the torn portion of the meniscus and contouring (smoothing) the edges of the tear can prevent:

- Progression of the tear (increasing in size).
- Displacement of the tear, which causes the painful mechanical symptoms of catching, locking or giving way.
- Damage to surrounding cartilage by the meniscal fragments getting caught in the knee mechanism.

Unfortunately, these degenerative meniscus tears are also an early sign that the knee is starting to wear out and develop arthritis (wearing out of the smooth cartilage surface on the ends of the bones at the joint) and some knees (partial menisectomy or not) will continue to show progression of arthritis.



Arthroscopic view of a normal meniscus

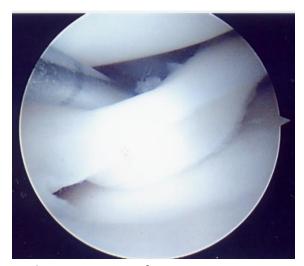


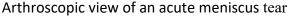
Arthroscopic view of a degenerative meniscus tear

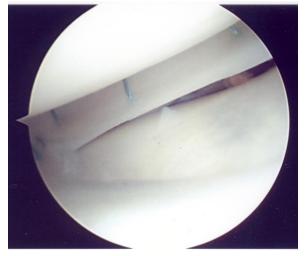




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Arthroscopic view of a meniscus repair

Contraindications to Surgery

- Infection of the knee
- Inability or unwillingness to complete an appropriate postoperative rehabilitation program
- Pain or symptoms not related to the meniscus
- Diffuse advanced arthritis of the knee without mechanical symptoms

Potential Surgical Risks and Complications

- Infection
- Re-tearing of the remaining meniscus, as we try to save as much of it as possible
- Re-tear or non-healing of the meniscal repair
- Knee stiffness (loss of knee motion)
- Continued pain and progressive arthritis
- Weakness of the quadriceps muscles if proper rehabilitation is not performed
- Unexpected findings of significant areas of arthritis (wearing out of the protective cartilage surface of the bones at the knee joint) that are the cause of the symptoms and less treatable and require longer rehabilitation and activity modification
- Persistent swelling and need for meniscus transplant

Hospitalization and Anesthesia

- Outpatient surgery (you go home the same day)
- IV sedation or light general anesthesia with local numbing medicine injected around the knee





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General Surgical Technique

Dr. Chudik performs meniscal surgery with the assistance of an arthroscope (small camera that allows you look inside the knee through small incisions). Small shavers and cutting instruments are used to remove and contour the torn portion of meniscus if it is not repairable. For tears that are reparable, the edges of the tear are freshened; then sutures (stitches) are used to hold the torn edges together while the meniscus heals.

Preoperative Instructions

- Discontinue birth control pills
- Stop blood thinners such as aspirin, Coumadin[®], Lovenox[®], Xarelto[®] according to the prescribing doctor's directions
- Stop anti-inflammatory medicines such as ibuprofen, Advil[®], Motrin[®], Naprosyn[®], Alleve[®], etc.)
- Stop nutritional supplements and drinks like Vitamin C, ginseng, ginkgo biloba, etc.
- Stop smoking for surgery and during the first six weeks postoperatively to allow proper tissue healing

Do not eat or drink anything from midnight, the evening before surgery

Post-operative Course

- Keep the wound clean and dry for the three days following arthroscopic surgery, then you
 may shower but not submerge the wounds for three weeks. Open incisions for meniscal
 repair should be kept clean and dry for 10-14 days following surgery
- You will use crutches for approximately three days to three weeks for a partial meniscectomy or six weeks for a meniscus repair
- You will use a post-op knee brace for six weeks if your meniscus is repaired to keep the knee straight and protect the repair
- Physical therapy should begin two to three days after surgery and continue for approximately six weeks for a partial menisectomy and three to four months for meniscal repair. The success of meniscal surgery is dependent on the post-operative rehabilitation. It is crucial to follow through on and maintain a proper therapy schedule.

Return to Activity

You may return to sports when there is no pain and when full knee range of motion, muscle strength and endurance, and functional use has been restored. This usually requires at least four to six weeks following partial partial menisectomy and four to six months following meniscal repair.





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Scheduling Surgery

Call Dr. Chudik's surgery scheduler at 630-324-0402, or email contactus@chudikmd.com/ to:

- Schedule the date and location of surgery
- Schedule an appointment with Dr. Chudik's PA to complete pre-operative surgical education and other requirements
- Schedule a post-operative appointment with Dr. Chudik's team to remove sutures and review post-op instructions

Notify My Office if Symptoms Worsen



