## STEVEN CHUDIK MD SHOULDER, KNEE & SPORTS MEDICINE

### Medial Collateral Ligament Repair/Reconstruction

#### **Indications for Surgery**

Medial collateral ligament (MCL) sprains are sprains (partial tears) of one of the four major ligaments of the knee. The MCL is a structure that helps keep the normal relationship of the femur (thigh bone) and the tibia (leg bone) along the inner (medial) side of the knee. The MCL prevents the knee from buckling inward and is the ligament most commonly injured in sports. Sometimes, the MCL is completely torn and this results in instability and pain. In some cases when the MCL is unlikely to heal with conservative treatment, MCL repair or reconstruction is indicated.





MRI images of normal (left) and injured (right) MCL. Note the bright fluid that indicates swelling and injury

### **Contraindications to Surgery**

- Persons who demonstrate an inability or unwillingness to complete the necessary postoperative rehabilitation program should not have surgery
- Infection of the knee, current or previous, is a concern, but not an absolute contraindication





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#### **Potential Surgical Risks and Complications**

- Infection
- Injury to nerves (numbness) in the skin around the knee. It is not uncommon to have some small area of numbness, temporary or permanent, around the incisions
- A post-operative infection can require the graft to be removed to eradicate the infection
- Re-rupture or stretching of the repaired or reconstructed ligament, causing recurrent instability
- Knee stiffness (loss of knee motion) requiring prolonged rehabilitation or repeat surgery
- Rarely, pain from the fixation device used to hold the graft
- Rarely, a clot in the veins of the calf or thigh (deep venous thrombosis, phlebitis) that may break off in the bloodstream and go to the lungs (pulmonary embolus)

#### **Hospitalization and Anesthesia**

- Outpatient surgery (go home the same day)
- General anesthetic, femoral nerve block

#### **General Surgical Technique**

Some MCL tears are repairable (able to be sewn) while others are not. If the MCL is repairable, Dr. Chudik performs the repair through a limited incision on the inside of the knee. The pattern of the tear will determine if the ligament can be sown together with sutures or if suture anchors are required. If just sutures are needed, Dr. Chudik passes those sutures through the torn ends of the tendon and ties them together, thus holding the ligament together until it heals. If suture anchors are necessary, Dr. Chudik places the anchor(s) into the bone and passes the attached sutures through the ligament. He ties the sutures, securing the ligament to the bone. The wound is then closed and the leg is splinted or braced to protect the repair.

If the MCL is not repairable, a tendon graft is used to reconstruct the MCL. Graft tissue may be taken from the hamstring tendons or a cadaver tendon (allograft) may be utilized. Dr. Chudik will discuss graft options with the patient and together determine the best option. In this situation, Dr. Chudik reconstructs the MCL through one to two small incision(s) on the inside of the knee. The graft is placed along where the original MCL was and is secured in place with suture(s) and anchor(s). The wound is then closed and the leg is splinted or braced.





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#### **Preoperative Instructions**

- Discontinue birth control pills
- Stop blood thinners (aspirin, Coumadin®, Lovenox®, Xarelto®) according to the prescribing doctor's directions
- Stop anti-inflammatory medicines (ibuprofen, Advil®, Motrin®, Naprosyn®, Aleve®, etc.)
- Stop nutritional supplements and drinks (Vitamin C, ginseng, ginkgo biloba, etc.)
- Stop smoking for surgery and during the first six weeks postoperatively to allow proper healing of tissues
- Do not eat or drink anything after midnight the evening before surgery

#### **Postoperative Course**

- Crutches and non-weight bearing for approximately six weeks
- Hinged knee brace or splint for two weeks with knee locked straight, then gradually open brace to allow more motion (total brace time is six to eight weeks)
- Keep the wound clean and dry for the first 10 to 14 days after surgery. Showering lightly is allowed after two weeks but wounds cannot be submerged under water for three weeks
- Driving after six weeks if right lower extremity is involved
- Return to school/sedentary work in less than one week as long as the extremity can be elevated
- Physical therapy to restore motion, strength, and proprioception (balance) for up to four to six months.
- After the knee is fully rehabilitated, **Dr. Chudik's Knee Ligament Functional Capacity Evaluation** is performed to determine that the knee is fully rehabilitated and more importantly, that any errors in movement patterns (known to put patients at risk for knee injury) are corrected and the patient can return to activities safely.

#### **Return to Activity**

- Return to walking and regular daily activities once off crutches (six weeks after surgery)
- Return to running at about three months post-op
- Return to sports at four to six months post-op





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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. The hospital will call the day before with the time to arrive.
- Schedule a preoperative appointment
- Schedule a postoperative appointment to remove sutures and review postoperative instructions

**Notify My Office If Symptoms Worsen** 



