



Elbow Ulnar Collateral Ligament (UCL) Primary Repair with Internal Brace Augmentation FAQ

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Q: HOW DOES AN INJURY TO THE ELBOW UCL OCCUR?

- The medial UCL in the elbow stands for Ulnar Collateral Ligament. This is a structure that spans the inside of the elbow joint between the humerus (medial epicondyle) and the ulna (sublime tubercle).
- The UCL is responsible for stabilizing the elbow and keeping it well-aligned.
- During some overhead activities, including throwing a baseball or softball, javelin throwing, volleyball and tennis, the UCL is placed under significant stress.
- In some cases, the ligament can become injured as a result. This can occur either gradually over time, or as a result of a single injury. Sometimes, it can be a combination of both.
- When the UCL is injured, it often results in pain when trying to perform activities specific to an athlete's sport (such as throwing a ball or serving in tennis).

Q: WHEN IS SURGERY NEEDED?

- This can be a complex decision. In a majority of cases, rest and rehabilitation will be tried as treatment prior to proceeding with surgery. In some cases with a significant tear, surgery may be recommended sooner.
- In some cases, a platelet-rich plasma (PRP) injection may be discussed as an option to help with healing a partially-torn UCL.
- There may be other factors that come into play, such as patient age, sport, timing during a season, plans to play in the future and many others.
- In a majority of cases, surgery is only needed if an athlete would like to return to their specific sport. People can often tolerate a torn UCL and perform most daily activities without problems.

Q: WILL I NEED TO STAY OVERNIGHT AFTER SURGERY?

- No. UCL primary repair is performed as an outpatient surgery. You will arrive approximately 1.5 - 2 hours prior to your procedure. Typically, you will be able to return home about two hours after your surgery is over. Please ensure someone comes with you to surgery who will be available to drive you home. If you are a minor, your parent / legal guardian must be present the day of your surgery.

Q: HOW LONG DOES THE SURGERY TAKE?

- Approximately 60 minutes. Surgery time may vary slightly based on the complexity of your injury and procedures required. Dr. Hess will spend the required time to ensure any identified reasons for your symptoms are addressed. In addition to the UCL repair, sometimes other procedures are needed including removal of bone spurs, removal of loose bodies or repositioning of the ulnar nerve. These additional procedures will add time to the surgery.

Q: ARE THERE RISKS INVOLVED WITH HAVING SURGERY?

- Yes. Every medical procedure has certain risks. Some risks are present with any surgery, including those associated with anesthesia (heart attack, stroke, respiratory distress or failure), and some are more specific to the procedure being performed. Risks of UCL primary repair include, but may not be limited to: infection, damage to blood vessels or nerves (causing numbness, tingling, burning, or weakness), blood clots (deep vein thrombosis or pulmonary embolus), stiffness of the elbow (which can require additional surgery in some cases), iatrogenic injury (injury to structures caused by surgery), scarring, and residual pain or discomfort.
- There is also the possibility that the elbow continues to be painful or the ligament can re-tear. This risk varies depending on the age of the patient and sports in which they participate. It is possible that additional surgery may be recommended/needed if you reinjure your elbow.
- Some complications after surgery are uncommon and can't be predicted in advance.

Q: WHAT IS DONE DURING SURGERY?

- During surgery, an incision is made on the inside of the elbow and the injured UCL is exposed. The injured ligament is examined. If it is felt to be of adequate quality, the decision is made to repair the ligament (rather than perform reconstruction).
- Using a small drill, tunnels are made in the bone at either end of the ligament. Anchors are placed in each of these areas, and a strong stitch is used to repair the injured ligament back to its normal attachment. An separate strong stitch that acts as a 'seat belt' is also placed to protect the repaired ligament while it heals. This is called an 'internal brace'.
- A graft is not used for the UCL Primary Repair procedure.
- The repaired UCL heals back to the bone over time.
- In some cases, additional procedures are also performed (as noted above).
- The incision is then closed and a dressing and splint are applied.

Q: HOW LONG IS THE RECOVERY AFTER UCL PRIMARY REPAIR?

- This depends on how we define 'recovery'.
- Also, every individual patient's recovery is different, and may require more or less time than expected.
- At the first office visit after surgery (usuall 10-12 days after surgery), the splint is removed and the incision is examined. Any stitches that need to be removed are typically removed at this time.

- The patient is then placed in a hinged elbow brace that will be worn for 4 weeks.
- Most patients can return to school, light duty or sedentary work around 1-2 weeks after surgery.
- More strenuous work may require more time to return, with the specific time to return depending on the duties of your job.
- Most throwing athletes begin some light throwing around 3 months after surgery.
- Return to sports is a difficult decision and is highly variable. Most commonly, baseball athletes need around 6-9 months to return to position play and 9-12 months to return to pitching. Return to other sports is often similar, with each case being handled individually.
- Return to sports activities takes time. Muscles must gradually learn to adapt to higher impact, twisting, accelerating, and decelerating forces. This should not be rushed.

Q: WILL I NEED A BRACE AFTER SURGERY?

- Yes. Initially, a splint is placed after surgery. This keeps the elbow still and is used for the first 10-12 days. This should be left in place until removed at your first post-op office visit.
- After the first two weeks, a hinged elbow brace is used. This should be worn essentially full time for weeks 2-6. You should sleep with the brace.

Q: WILL PHYSICAL THERAPY BE NEEDED AFTER UCL PRIMARY REPAIR?

- Physical therapy is HIGHLY recommended after UCL primary repair surgery, as there are many important things to monitor and consider during recovery.
- Physical therapy will begin after your first post-op visit.
- The duration of physical therapy will be different for each patient but will typically last several months, with progressive activities and exercises prescribed as you recover. Initially, the visits are twice per week. This may change over the course of your recovery.
- The assessment of the physical therapist is a very important component when deciding if it is okay to return to sports.

Q: WHAT MEDICATIONS WILL BE PRESCRIBED AFTER SURGERY?

- Pain relievers will be prescribed after surgery. These are typically only needed for less than 7-10 days after surgery. You should plan on not using narcotic pain relievers longer than 2-3 weeks after surgery.
- Tylenol and/or ibuprofen/naproxen can be used once narcotics are no longer required.
- The pain medication will not completely prevent any pain. It is normal and appropriate to have some pain after surgery. The goal of using medication should be to make pain tolerable, not to eliminate pain.
- The following is a complete list of medications prescribed after surgery, and the purpose of the medication. Other medications may be prescribed on occasion.
 - Norco/Percocet –Taken as needed no more than every 4 hours for pain.
 - Zofran – Taken as needed for nausea/vomiting

Q: HOW MUCH PAIN AM I GOING TO HAVE AFTER SURGERY?

- This is a common question, but one that is very difficult to answer. Every patient experiences pain differently. The same procedure may cause drastically different amounts of pain in different patients.
- Key components of controlling pain after surgery include icing the area, taking appropriate pain medications, limiting activity appropriately, and following recommendations by the physical therapist and Dr. Hess.
- A nerve block is sometimes placed by the anesthesia team during surgery. This block often works for several hours after surgery. As a result, your pain may be well controlled initially, but may increase after the block wears off. This is a normal part of the block wearing off, and shouldn't be cause for concern in most cases. When you start to feel tingling in the arm, this is an indication that the block is beginning to wear off. This is a good time to begin taking pain medication.
- If there are concerns about pain control, please bring them up with Dr. Hess prior to surgery or call his patient care coordinator Tracey after surgery. Dr. Hess can return phone calls if needed.

Q: WHEN WILL I HAVE FOLLOW UP APPOINTMENTS AFTER SURGERY?

- Follow up appointments after surgery are important to monitor your progress, assess any limitations or setbacks, and to plan your continued care. Typically, you will be seen at the following intervals:
 - 2 weeks, 6 weeks, 3 months, 5 months, 7 months, 9 months, 1 year.
 - Additional appointments may be recommended in certain situations.

Q: WHEN CAN I BEGIN DRIVING AFTER UCL RECONSTRUCTION?

- Two important criteria exist to begin driving after UCL reconstruction.
 - 1) You must be off narcotic medications for a full 24 hours prior to driving.
 - 2) You must be safely able to drive the vehicle with the splint/brace in place.

Q: WILL UCL PRIMARY REPAIR ALLOW MY ELBOW FULL FUNCTION ONCE RECOVERED?

- In most cases function recovers to full, or very close to the pre-injury elbow. However, as discussed above, limited function is one of the associated risks.
- Physical therapy is critical in your recovery.
- It is important that you also spend time every day (outside of formal therapy) during recovery doing the prescribed exercises to improve your range of motion and strength, when appropriate.

Q: WHAT DO I DO WITH THE DRESSINGS AFTER SURGERY?

- It is recommended that you leave the splint in place, undisturbed for 10-12 days after surgery until your first post-op office visit.
- Some minimal drainage is expected after surgery. If there is more significant drainage, please notify Dr. Hess.

Q: WILL I BE ABLE TO RETURN TO THE SAME SPORTS AFTER SURGERY THAT I WAS DOING BEFORE SURGERY?

- In most cases, yes. This can depend on the age and activity level of the patient and the specific sports they are trying to return to.
- Certainly, the goal of UCL reconstruction is to restore the function of your elbow to a point that you are able to participate in any activities you would like. However, in some cases pain, stiffness, residual instability, nervousness about reinjury or other factors can prevent return to some activities.

Q: CAN THE INJURY HAPPEN AGAIN?

- It is possible for an injury to the UCL to recur. By following the recommendations of Dr. Hess and your physical therapist, we hope to minimize these risks. Ongoing maintenance exercises are often necessary to keep the arm strong.

Q: HOW IS UCL PRIMARY REPAIR DIFFERENT FROM UCL RECONSTRUCTION?

- UCL Primary Repair is performed when the quality of the injured UCL tissue is felt to be adequate and additional graft tissue is not needed.
- The injured UCL itself is re-attached rather than placing a new graft on top of it.
- The advantages are that a repair of your own UCL tissue allows for faster healing since it does not require a tendon from elsewhere in the body to become a mature ligament (as in a reconstruction). It also does not require taking the tissue from another part of your body, possibly making recovery easier.
- A primary repair is usually only performed when there is a single injury to an otherwise normal ligament. This occurs more often in younger patients.
- The drawbacks to UCL Primary Repair include the fact that there is less extensive research available at this time. The available results show outcomes very similar results to UCL reconstruction. Also, it is possible that despite appearing normal on MRI and during surgery, there is actually more significant damage to the ligament than is apparent and this could lead to failure of the repair.
- The decision on whether or not primary repair of the UCL is an option will not be known for sure until surgery is performed and the ligament can be examined. It is possible that a UCL Reconstruction may be necessary if the ligament appears damaged, even if the original plan was to repair the injured ligament.

Help us improve our care: What other questions would you like to have answered?
