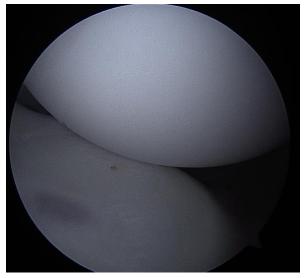
STEVEN CHUDIK MD SHOULDER, KNEE & SPORTS MEDICINE

Arthroscopic Shoulder Cartilage Repair, Transfer and Transplant

Indications for Surgery

Cartilage, the protective surface that covers the ends of our bones, helps our joints move smoothly and without pain. Cartilage may become damaged with age, wear and tear, or injury. This wearing away of the cartilage surface and the associated symptoms of pain, stiffness and swelling is known as arthritis. Currently, there are limited options to address the early stages of arthritis when the cartilage wear is diffuse (wide spread) on the joint surface. Arthroscopic procedures can clean up the torn, worn out edges of the cartilage, and treat limited areas of cartilage damage to successfully improve symptoms and function.





Arthroscopic images of healthy cartilage (left) and cartilage damage after debridement (right).

Contraindications to Surgery

- Infection
- Inability or unwillingness to complete an appropriate postoperative rehabilitation program
- Diffuse, advanced arthritis (damaged cartilage) of the shoulder without mechanical symptoms





STEVEN CHUDIK MD

SHOULDER, KNEE & SPORTS MEDICINE

Potential Surgical Risks and Complications

- Infection
- Shoulder stiffness (loss of knee motion)
- Failure of cartilage grafts or treatments to heal sufficiently
- Continued pain and progressive arthritis
- Persistent swelling, symptoms, and need for total shoulder replacement

Hospitalization and Anesthesia

- Outpatient surgery (go home the same day)
- General anesthesia with femoral nerve block (see "Your Surgical Experience" booklet)





Abrasionplasty and debridement of cartilage lesion glenoid.

General Surgical Technique

Dr. Chudik performs cartilage repair and transplant procedures arthroscopically with small incisions. Arthroscopic shavers and ablations instruments are used to remove and contour the torn loose edges of cartilage and there are several options for cartilage restoration, depending on the specific location and severity of the cartilage damage.

- Abrasionplasty: The cartilage defect is debrided back to stable borders and the base of the lesion is abraded to a bleeding surface to allow blood and marrow elements to fill to defect.
- **Microfracture:** A similar concept to the abrasion plasty procedure in which deeper holes are created to access the blood and marrow components





STEVEN CHUDIK MD

SHOULDER, KNEE & SPORTS MEDICINE

.

- Autologous Chondrocyte Implantation: This two-stage surgery involves first harvesting
 cartilage cells, and then allowing them to grow in a lab environment. Later, in a second
 surgery, a thin layer of periosteal tissue is placed over or a synthetic collagen matrix is
 placed in the cartilage defect, and then the cells are injected into the space in attempt to
 regrow and fill in the gap.
- Osteochondral Autologous Transfer (OATs): A piece of healthy bone and cartilage is harvested from a lesser weight-bearing area of another joint and then transferred into the damaged area.
- Osteochondral Allograft Transplant: In patients that have larger defects, a bone and cartilage plug from a cadaver is transplanted into the cartilage-deficient area.

Post-Operative Course

- You will use a sling at all times except for bathing, dressing and exercises for six weeks following surgery, especially while you sleep. This prohibits driving.
- You WILL NOT be allowed to actively move your repaired shoulder (moving it with its own shoulder muscles) for up to six weeks following surgery to protect the repair and allow healing.
- You may feel more comfortable sleeping sitting upright (on a couch or recliner chair) after surgery.
- Keep the wound clean and dry for three days following all arthroscopic surgery and ten to 14 days following open surgery. You may shower lightly after three days (all arthroscopic) and 14 days (open surgery), but wounds cannot be submerged under water for three weeks.
- Driving <u>after</u> six to eight weeks.
- Return to school/sedentary work in less than one to two weeks as long as you are in your sling and do not use the extremity. Typing, writing or purposeful movement with the involved extremity is NOT allowed.
- Physical therapy should begin two to three days after surgery and continue for four to six months. The success the repair is highly dependent on the post-operative rehabilitation. It is crucial to follow a proper therapy schedule.

Return to Activity

You may return to activities when there is no pain and full shoulder range of motion, muscle strength and endurance, and functional use has been restored. This usually requires four to six months following a cartilage. Dr. Chudik will tell you when it is safe to resume activities. Depending on the severity of the cartilage damage and the type of repair, Dr. Chudik may advise you about recommended activity restrictions.





STEVEN CHUDIK MD

SHOULDER, KNEE & SPORTS MEDICINE

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[®], 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

Scheduling Surgery

Contact Dr. Chudik's surgery scheduler at 630-324-0402 or *contactus@chudikmd.com* to:

- Schedule the date and location of surgery (the hospital will call the day before with the confirmed arrival time)
- Schedule a pre-operative appointment
- Schedule a post-operative appointment to remove sutures and review post-operative instructions

Notify My Office if Symptoms Worsen



