

**STEVEN CHUDIK MD**  

---

---

**SHOULDER, KNEE & SPORTS MEDICINE**

## **Arthroscopic Biologic Total Shoulder Resurfacing**

### **Indications for Surgery**

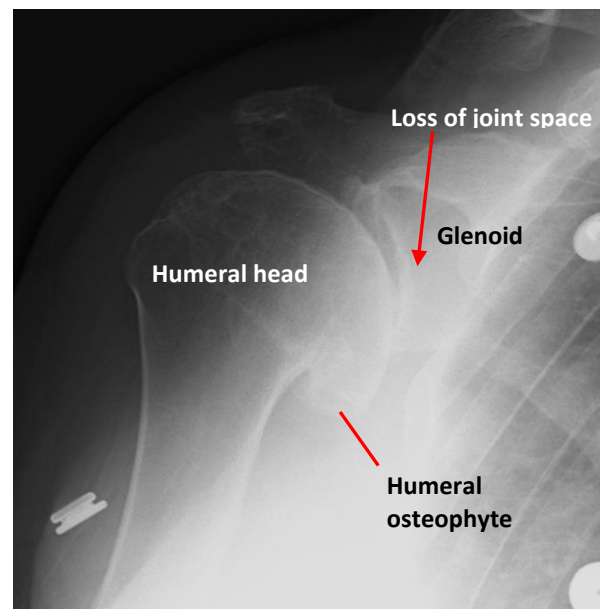
Glenohumeral (shoulder) arthritis occurs when the protective cartilage covering the ends of the bones at the shoulder joint wears out. The shoulder is comprised of the glenoid (socket of the shoulder joint) and the humeral head (ball of the shoulder joint). The cartilage covering the glenoid and humeral head wears out from excessive joint loading over time in patients genetically susceptible to arthritis or following injury.

Currently, the definitive treatment for shoulder arthritis is a total shoulder arthroplasty, in which the joint surfaces are replaced by metal and plastic components. However, there are new innovations under development, including biologic total shoulder resurfacing. While this surgery is not yet commonly available, there are several advantages to this procedure over the current TSA technique, including:

- A less invasive procedure
- Better restoration of original anatomy
- No need to cut rotator cuff muscles to gain access to the joint
- Procedure does not include dislocation of the joint
- Outpatient surgery (no hospital admission)



X-rays of glenohumeral (shoulder) arthritis. Note the lack of joint space between the bones



# STEVEN CHUDIK MD

---

---

## SHOULDER, KNEE & SPORTS MEDICINE

### Contraindications to Surgery

- Infection
- Inability or unwillingness to complete the postoperative program including immobilizing the shoulder in a sling for six weeks and performing physical therapy two to three times per week for four months
- Patients with poor general health (unable to safely proceed with surgery)

### Potential Surgical Risks and Complications

- Infection
- Bleeding
- Rejection of biological implants
- Rarely, injury to nerves (numbness, weakness, paralysis) of the shoulder and arm
- Persistent stiffness or loss of motion of the shoulder
- Moving or breaking of surgical hardware
- Need for revision surgery (conversion to total shoulder arthroplasty)
- Failure of transplanted bone and cartilage

### Hospitalization and Anesthesia

- Either outpatient surgery (go home after surgery) or 23-hour overnight stay
- General anesthesia with an interscalene nerve block (see “Your Surgical Experience” guide)

### General Surgical Technique

Using small incisions and tools, Dr. Chudik is able to view the shoulder joint using a tiny arthroscopic camera. Using the same incisions and portals, the surfaces of the humerus and glenoid are prepared with special tools, and then cartilage from a cadaver donor is attached to the bones, restoring the smooth surfaces.

The biologic resurfacing is arthroscopic rather than the traditional open procedure, meaning that Dr. Chudik does not have to cut through any of the rotator cuff muscles to access the shoulder joint. This allows a better recovery without concern of rehabilitating a repaired rotator cuff. Research trials are currently in progress, and the future is promising for this procedure and others like it.

Because survivorship of the transplanted cartilage and pain relief are not predictable, a traditional shoulder replacement with artificial surfaces is superior in older patients.



Orthopaedic Surgery & Sports Medicine  
Teaching & Research Foundation  
[otrfund.org](http://otrfund.org)

630-324-0402 • [contactus@chudikmd.com](mailto:contactus@chudikmd.com)  
[stevenchudikmd.com](http://stevenchudikmd.com)

© 2017 Steven Chudik MD Shoulder, Knee & Sports Medicine. All rights reserved.



Schedule online now

# STEVEN CHUDIK MD

---

---

## SHOULDER, KNEE & SPORTS MEDICINE

### Post-operative Course

- Patients will use a sling at all times except for bathing, dressing, and exercises for six weeks following surgery, especially while sleeping. This prohibits driving
- Patients will **not** be allowed to actively move the surgical shoulder for at least six weeks following surgery in order to protect the transplanted cartilage and allow it to heal
- Patients 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 arthroscopic shoulder surgery. Showering lightly after three days is permitted, but wounds cannot be submerged under water for three weeks
- Driving after six to eight weeks
- Return to school/sedentary work in less than one to two weeks as long as sling is worn. No use of the extremity. No typing, writing, or purposeful movement of that arm for six weeks
- Physical therapy should begin two to three days after surgery and continue for four months. The success of a biologic shoulder resurfacing is highly dependent on the post-operative rehabilitation. It is crucial to follow through and maintain a proper therapy schedule.

### Return to Activity

- Return to activity depends on the progress in physical therapy and intended activities, typically four to six months
- Full shoulder motion and strength are necessary before returning to activities

### Return to Activity

Patients may return to activities when rehabilitation is complete and functional use has been restored. This usually requires four to six months following a total shoulder arthroplasty. Dr. Chudik has special protocols for returning to golf and other recreational activities.

### 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 evening before surgery**



Orthopaedic Surgery & Sports Medicine  
Teaching & Research Foundation  
[otrfund.org](http://otrfund.org)

630-324-0402 • [contactus@chudikmd.com](mailto:contactus@chudikmd.com)  
[stevenchudikmd.com](http://stevenchudikmd.com)



Schedule online now

# STEVEN CHUDIK MD

---

## SHOULDER, KNEE & SPORTS MEDICINE

### Scheduling Surgery

Call Dr. Chudik's surgery scheduler at 630-324-0402 or email [contactus@chudikmd.com](mailto:contactus@chudikmd.com) to:

- Schedule the date and location of surgery. The hospital will call the day before with the time
- Schedule a pre-operative appointment
- Schedule a postoperative appointment to remove sutures and review postoperative instructions

### Notify My Office If Symptoms Worsen



Orthopaedic Surgery & Sports Medicine  
Teaching & Research Foundation  
[otrfund.org](http://otrfund.org)

630-324-0402 • [contactus@chudikmd.com](mailto:contactus@chudikmd.com)  
[stevenchudikmd.com](http://stevenchudikmd.com)



Schedule online now