

STEVEN CHUDIK MD

SHOULDER, KNEE & SPORTS MEDICINE

**Sternoclavicular (SC) Separation
Requiring Ligamentous Repair/Reconstruction Surgery**

Indications for Surgery

Sternoclavicular (SC) joint separations is an uncommon sprain of the ligaments at the joint between the sternum (breastbone) and the clavicle (collarbone). When ligaments are overstretched, they become taut and give way at their weakest point, either where they attach to the bone or within their mid-substance. The resulting injury may range from a minor sprain with no displacement of the bones to a more severe injury in which the clavicle completely loses contact with the sternum. The clavicle may move outward (anteriorly) to become more prominent, causing a bump on the chest or backward behind the sternum (posteriorly). Surgery is usually reserved for those with posteriorly displaced SC sprains. In these cases, the clavicle moves backwards towards the neck and can cause compression of the vital structures in the neck (airway, voice box, or blood vessels to the arms or head). This is usually an emergency that requires surgery to reduce the posteriorly displaced SC joint separation. Rarely, surgery to reconstruct the sternoclavicular ligaments is needed for those with chronic pain who have not recovered after four to six months of conservative treatment.

Contraindications to Surgery

- Infection
- Shoulder stiffness
- Inability or unwillingness to complete the postoperative program
- Patients with poor general health which is not sufficient to proceed with surgery

Potential Surgical Risks and Complications

- Infection
- Injury to nerves (numbness, weakness, paralysis) of the shoulder, arm, forearm and hand (rare).
- Reconstructed ligaments stretch out and loss of reduction (joint separation) and recurrence of the deformity
- Breakage of internal fixation devices
- Erosion or fracture of the clavicle
- Shoulder stiffness (uncommon)
- Persistent pain with overhead activities
- Need for revision surgery
- Chronic pain



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Hospitalization and Anesthesia

- Outpatient surgery (you go home the same day)
- General anesthetic with interscalene block (see *Your Surgical Experience* booklet)

General Surgical Technique

Majority of sternoclavicular injuries are anterior and treated non-operatively. Surgery to attempt to repair or reconstruct the sternoclavicular ligaments has limitations and is avoided if possible. For posterior sternoclavicular dislocations, careful surgical reduction of the clavicle is important to prevent injury to adjacent vascular structures and reconstruction of the ligaments is not always required. If symptomatic instability of the joint requires, surgical reconstruction is performed using a tendon graft (usually a hamstring tendon from the knee) to replace the torn ligaments. The repair/reconstruction can also be reinforced using strong sutures to help maintain the proper alignment of the bones at the sternoclavicular joint while the repaired or reconstructed ligaments heal.

Postoperative Course

- Your shoulder motion will be restricted in a sling for six weeks following surgery in order to protect the repair and allow it to heal. 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 may feel more comfortable sleeping sitting upright (on a couch or recliner chair).
- Keep the wound clean and dry for ten to 14 days following open surgery. You may shower lightly after 14 days but wounds cannot be submerged under water for three weeks.
- Driving after six weeks and out of the sling
- Return to school/sedentary work in less than one to two weeks if you are in your sling with limited use of the operative extremity.
- Physical therapy should begin two to three days after surgery and continue for four to six months. The success of acromioclavicular joint reconstruction is highly dependent on the post-operative rehabilitation. It is crucial to follow through on and maintain a proper therapy schedule.
- To allow the ligaments to heal properly, strengthening must be delayed nine to 12 weeks following surgery.



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Return to Activity

- The time to return depends on the type of activity, sport, and position, as well as the arm injured (dominant versus non-dominant).
- At least six months is required after surgery before return to sports/strenuous labor.
- Full shoulder motion and strength are necessary before returning to sports/strenuous labor.

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

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

