

**SUPERIOR CAPSULAR RECONSTRUCTION
POST-SURGICAL REHABILITATION PROTOCOL**

POST-OP DAYS 1-14

- Immobilizer abduction pillow-even while sleeping
 - Place pillow under shoulder / arm while sleeping for comfort
- Hand squeezing exercises
- Elbow and wrist active motion with shoulder in neutral position
- Supported pendulum exercises
- Shoulder shrugs / scapular retractions without resistance
- Stationary bike (must wear immobilizer)
- Ice pack

GOALS

- Pain control
 - Protection of graft/surgical sites
 - Maintenance of wrist/elbow range of motion, grip strength
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WEEKS 2-3

- Begin PROM⁸
- Pendulums
- Table Slides

GOALS

- PROM
 - Flexion to 90°
 - Abduction to 90°
 - ER to 30°
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WEEKS 3-6

- Discontinue sling at 4-6 weeks^{1,3,5}
- Continue appropriate previous exercises
- Begin isometrics of the shoulder at 4-6 weeks
- Pendulum exercises

GOALS

- PROM
 - Flexion to 130
 - Abduction to 90
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WEEKS 6-9

- Continue appropriate previous exercises
- Begin AAROM/AROM around 6 weeks^{6,7}
 - AAROM-Flexion and Abduction > 90° (pulleys, supine wand)
 - ER as tolerated (wand doorway stretch)
- Standing rows with theraband
- Theraband IR/ER
- Prone scapular retraction exercises without weights
- Biceps and triceps exercises without weight
- Stairmaster
- Treadmill-walking progression program
- Pool walking/running

GOALS

- AAROM Flexion and Abduction to 150°
 - PROM
 - Flexion to 160-170°
 - External rotation to 60°
 - Abduction to 90°
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WEEKS 9-12

- Begin strengthening rotator cuff in neutral around 8-9 weeks^{3,5,6}
 - Without resistance
 - Sidelying ER
- Continue appropriate exercises
- Seated row with light weight
- Body Blade at side
- Ball on wall (arcs, alphabet)
- Ball toss with arm at side using light ball
- Elliptical

GOALS

- AAROM, AROM through functional range without pain
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WEEKS 12-16

- Light or un-resisted rotator cuff exercises
- Push up on wall

GOALS

- Maintain AAROM/AROM
 - Protect graft during re-vascularization (decreased strengthening exercises)
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MONTHS 4-6

- Begin increasing resistance on theraband exercises as tolerated
- Push up progression (table to chair)
- Light plyometric exercises
- Body blade with abduction

GOALS

- Functional AROM
 - Normal rotator cuff strength
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MONTHS 6-8

- Weight training with light resistance
- Regular push ups
- Sit ups
- Running progression to track
- Transition to home/gym program

GOALS

- Return to all activities
 - Range of Motion⁵
 - Elevation: 115°-180°
 - External Rotation: 23°-57°
 - Internal Rotation to L1
 - Strength⁵
 - Abduction: 5- or greater
 - External Rotation: 5- or greater
 - Internal Rotation: 5 or greater
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References

- (1) Adams, C. R., et al. "The Arthroscopic Superior Capsular Reconstruction." *American journal of orthopedics (Belle Mead, NJ)* 45.5 (2016): 320.
 - (2) Adams JE, Zobitz ME, Reach JS Jr, An KN, Steinmann SP. Rotator cuff repair using an acellular dermal matrix graft: an in vivo study in a canine model. *Arthroscopy*. 2006;22(7):700-709.
 - (3) Katthagen, C. J., D. Tahal, and P. Millett. "Arthroscopic superior capsule reconstruction for irreparable rotator cuff tears." *Orthopedics Today, March* (2016).
 - (4) Lee, Bong Gun, Nam Su Cho, and Yong Girl Rhee. "Effect of two rehabilitation protocols on range of motion and healing rates after arthroscopic rotator cuff repair: aggressive versus limited early passive exercises." *Arthroscopy: The Journal of Arthroscopic & Related Surgery* 28.1 (2012): 34-42.
 - (5) Mihata, Teruhisa, et al. "Clinical results of arthroscopic superior capsule reconstruction for irreparable rotator cuff tears." *Arthroscopy: The Journal of Arthroscopic & Related Surgery* 29.3 (2013): 459-470.
- "Superior Capsular Reconstruction." *Arthrex*, 2017, <https://www.arthrex.com/shoulder/superior-capsule-reconstruction-technique>.
- (6) Petri, Maximilian, Joshua A. Greenspoon, and Peter J. Millett. "Arthroscopic superior capsule reconstruction for irreparable rotator cuff tears." *Arthroscopy techniques* 4.6 (2015): e751-e755.
 - (7) Tokish, John M., and Clint Beicker. "Superior capsule reconstruction technique using an acellular dermal allograft." *Arthroscopy techniques* 4.6 (2015): e833-e839.
 - (8) Uezono, Keiji, et al. "Effect of postoperative passive motion on rotator cuff reconstruction with acellular dermal matrix grafts in a rat model." *The American journal of sports medicine* 42.8 (2014): 1930-1938.