

THERMAL - ASSISTED CAPSULORRAPHY

With or without SLAP Repair

**It is important for the clinician to determine the capsular response to the heat probe. Patients that have excessive ROM early in the rehab needed to be slowed down to 1x/week, and allowed to “tighten up”. In those patients that seem to get too tight their program may need to be accelerated slightly to assure they meet their ROM goals at the appropriate time. If you have questions please call the office to discuss the proper treatment regimen. (314) 336-2642.

Phase I Protection Phase (Week 0-6)

Days 0-14

The patient is seen 2 days post-operative to remove surgical dressings and pain catheter. Showering allowed once dressing and catheter is removed. The patient is seen 1-2x/week for supervised rehab. MD visits at 2 weeks, and 6 weeks.

Rehabilitation Goals:

- Protection of healing capsule and SLAP repair
- Early protected motion of shoulder, elbow, wrist, and hand
- Decrease post-operative pain and swelling

Precautions:

- Sleep in sling/bolster
- No overhead activities for initial 6 weeks
- No lifting/carrying with surgical extremity for 6-8 weeks

Brace Use: During the first 2 weeks, the patient wears sling/bolster 24 hrs./day except when in PT and showering.

Modalities: Cryotherapy, interferential stimulation for pain control

Exercises:

- Passive Range of Motion (NO PULLEYS)
 1. Flexion to 75 deg. (Week 1), 90 deg. (Week 2)
 2. IR in scapular plane to 45 deg.
 3. ER in scapular plane to 25 deg.
- Hand grip with putty or tennis ball
- AROM: elbow flexion-extension, forearm pronation-supination
- AROM: cervical spine
- Submaximal isometric shoulder exercise in all planes
- Initiate rhythmic stabilization drills (Week 2)
- No isolated biceps contractions if SLAP Repair

Week 3-4:

Rehabilitation Goals:

- Protection of healing capsule
- Early protected active motion of shoulder
- Restore normal scapulohumeral rhythm
- Control shoulder pain
- Improve strength of shoulder musculature to 4/5

Brace Use: Brace is typically discontinued at 2 weeks. MD may extend brace use at night depending on status of shoulder stability at 2 week visit.

Modality Use: Ice, electric stimulation as needed for pain control

Exercises:

- Range of Motion exercises
 1. Flexion to 120 deg.
 2. Scaption to 100 deg.
 3. IR in scapular plane to 50 deg.
 4. ER in scapular plane to 30 deg.
- Isometric shoulder exercise in all planes
- PRE's for elbow and wrist
- Isometric scapular stabilization
- Rhythmic stabilization
- Tubing for IR/ER at Week 4
- Cardio: Stationary cycling

Week 5-6:

Rehabilitation Goals:

- Protection of healing capsule
- Increase active motion of shoulder (Flexion 145 deg., Scaption 145 deg., IR & ER to 60 deg. In scapular plane, and 45 deg. Abduction)
- Control shoulder pain
- Normal joint arthrokinematics
- Improve strength of shoulder musculature to 5/5

Modality Use: Ice, electric stim as needed for pain control

Exercises:

- ROM Exercises:
 1. Flexion to 145
 2. Scaption to 145

3. IR @ 45 abduction to full
 4. ER @ 45 abduction to 60 deg.
- Continue with Weeks 2-4 exercises
 - Initiate light pain free stretching exercise
 - Initiate full can exercise against gravity without additional resistance until week 6
 - Initiate manual resisted PNF D2 diagonal
 - Initiate isotonic exercise
 1. Supine shoulder protraction
 2. Supine elbow extension
 3. Sidelying ER
 4. Prone row to plane of body
 5. Wrist flexion, extension, pronation, supination
 - No biceps strengthening if SLAP Repair
 - Cardio: Stationary cycling

Phase II Intermediate Phase (Weeks 7-12)

The patient is seen 2 days/week for supervised rehab and performs home program 3x/week. MD visit at 12 weeks.

Weeks 7-8:

Rehabilitation Goals:

- Restore full range of shoulder motion
- Improve shoulder dynamic stability
- Improve shoulder proprioception

Modality Use: Ice, Electric stimulation as needed for pain control

Exercises:

- ROM Exercises:
 1. Flexion to 165
 2. Scaption to 180
 3. ER @ 90 Abd. To 75 deg. (Week 7), 90 deg. (Week 8)
 4. IR @ 90 Abd. To Full
- Initiate capsular stretching for posterior and inferior capsule
- Continue with Weeks 5-6 exercises
- Initiate isotonic exercise including:
 1. Lateral Raise (Week 7)
 2. Bicep Curl (Week 8) or earlier if no SLAP Repair
- Cardio: Stationary cycling, elliptical trainer, deep water running with vest

Weeks 9-12:

Rehabilitation Goals:

- Symmetric shoulder active range of motion by Week 12
- Independent use of surgical extremities for all ADL's
- Isokinetic strength of IR & ER to within 30% of non-involved extremity

Modalities: Ice, electric stim as needed for pain control

Exercises:

- T-bar exercises to end range in all directions
- Continue with all isotonic exercises
- Progress elastic resistance to 90 deg. Abduction at Week 10
- Push up progression from wall (Week 9) to table (Week 10) to floor (Week 12)
- Cardiovascular/pulmonary exercise: Athlete can begin over ground running at Week 9

Phase III: Dynamic Strengthening Phase (Weeks 13-20)

Patient is seen weekly-biweekly to monitor progress. Patient performs independent conditioning program.

Criteria to enter Phase III:

- Full, pain free AROM surgical shoulder
- Stable clinical exam
- Isokinetic strength scores within 30%

Rehabilitation Goals:

- Improve surgical extremity strength, power, and endurance
- Isokinetic strength for concentric and eccentric IR/ER within 10% of non-surgical extremity by Week 16
- Preparation to return to sport activities

Exercises:

- Stretching to maintain ROM for overhand activity
- Initiate two-handed plyometric exercises using Rebounder at Week 13
- Progress to single arm plyometric exercise at Week 15
- Continue with all isotonic exercises
- D1/D2 elastic resistance exercises
- Wall ball bounces
- Weight room: bench press, lat pulldowns (in front only), seated rows

Phase IV: Return to Activity (Weeks 21-28)

Patient is seen biweekly to monitor progress. Patient performs independent conditioning program. Patient performs functional progression to return to sport under supervision of physician and therapy team.

Criteria to enter Phase IV:

- Full, pain free AROM surgical shoulder
- Stable clinical exam
- Isokinetic strength scores within 10%

Rehabilitation Goals:

- Completion of sport specific functional progression

Exercises:

- Patient is performing all conditioning exercises specific to sport
- Patient has to follow precautions of avoiding extension past plane of body
- No heavy weight with arm at side causing inferior glide force

Functional Progression: Athlete follows functional progression to return to specific sport. Approval from MD required to begin functional progression and patient must have MD approval for full release to sport or work.