

Rehabilitation Protocol Arthroscopic Rotator Cuff Repair For Partial Thickness Tear and Patch Augmentation

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The intent of this protocol is to provide the clinician with a guideline of the post-operative rehabilitation course of a patient that has undergone an arthroscopic assisted/mini-open rotator cuff repair. It is no means intended to be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam/findings, individual progress, and/or the presence of post-operative complications. If a clinician requires assistance in the progression of a post-operative patient they should consult with the referring Surgeon.

Progression to the next phase based on Clinical Criteria and/or Time Frames as Appropriate.

Phase I – Immediate Post Surgical Phase (Weeks 1-4):

Goals:

- _ Maintain integrity of repair
- _ Diminish pain and inflammation
- _ Prevent muscular inhibition
- _ Independent with ADL's with modifications while maintaining the integrity of the repair.

Precautions:

- _ No active range of motion (AROM) of Shoulder
- _ Maintain arm in sling, remove only for exercise
- _ No lifting of objects
- _ No shoulder motion behind back
- _ No excessive stretching or sudden movements
- _ No supporting of body weight by hands
- _ Keep incision clean and dry

Criteria for progression to the next phase (II):

- _ Passive range of motion (PROM) Flexion to at least 100 degrees
- _ PROM ER in scapular plane to at least 45 degrees
- _ PROM IR in scapular plane to at least 45 degrees
- _ PROM Abduction to at least 90 degrees in the scapular plane

Week 1-2:

- _ Abduction brace / sling
- _ Sleep in brace / sling
- _ Begin scapula musculature isometrics / sets; cervical ROM
- _ Patient education: posture, joint protection, positioning, hygiene, etc.
- _ Cryotherapy for pain and inflammation
 - Day 1-2: as much as possible
 - Day 3-6: post activity, or for pain

Week 2-4:

- _ Continue use of brace / sling
- _ Pendulum Exercises (to begin 21 days after surgery, no pendulums before this time)
- _ Start passive ROM to tolerance (at 21 days)
 - Flexion
 - Abduction in the scapular plane
 - ER in scapular plane
 - IR in scapular plane
- _ Continue Elbow, wrist, and finger AROM / resisted
- _ Cryotherapy as needed for pain control and inflammation

Phase II – Protection Phase (Week 6-10):

Goals:

- _ Allow healing of soft tissue
- _ **Do not overstress healing tissue**
- _ Gradually restore full active ROM (week 6-8)
- _ Decrease pain and inflammation

Precautions:

- _ No lifting objects heavier than a glass of milk
- _ No supporting of body weight by hands and arms
- _ No excessive behind the back movements
- _ No sudden jerking motions

Criteria for progression to the next phase (III):

- _ Full AROM

WEEK 6-8:

- _ Discontinue use of brace at week 6
- _ Between weeks 6 & 8 may use brace / sling for comfort only
- _ Discontinue brace / sling at end of week 8

- _ Initiate active assisted range of motion (AAROM) flexion in supine position
- _ Gentle Scapular/glenohumeral joint mobilization as indicated to regain full active ROM
- _ Continue previous exercises in Phase I as needed
- _ Continue all precautions
- _ Initiate prone rowing to neutral arm position
- _ Continue cryotherapy as needed
- _ May use heat prior to ROM exercises
- _ May use pool (aquatherapy) for light ROM exercises
- _ Ice after exercise

WEEK 8-10:

- _ Continue AAROM and stretching exercises
- _ Begin rotator cuff isometrics
- _ Initiate active ROM exercises
 - Shoulder flexion scapular plane
 - Shoulder abduction

Phase III – Intermediate phase (week 10-14):

Goals:

- _ Full AROM (week 10-12)
- _ Maintain Full PROM
- _ Dynamic Shoulder Stability
- _ Gradual restoration of shoulder strength, power, and endurance
- _ Optimize neuromuscular control
- _ Gradual return to functional activities

Precautions:

- _ No heavy lifting of objects (no heavier than 5 lbs.)
- _ No sudden lifting or pushing activities
- _ No sudden jerking motions

Criteria for progression to the next phase (IV):

- _ Able to tolerate the progression to low-level functional activities
- _ Demonstrates return of strength / dynamic shoulder stability
- _ Re-establish dynamic shoulder stability
- _ Demonstrates adequate strength and dynamic stability for progression to higher demanding work/sport specific activities.

- _Continue stretching and passive ROM (as needed)
 - _Dynamic stabilization exercises
 - _Initiate strengthening program
 - External rotation (ER)/Internal rotation (IR) with therabands/sport cord/tubing
 - ER Sidelying
 - Lateral Raises*
 - Full Can in Scapular Plane* (avoid empty can abduction exercises at all times)
 - Prone Rowing
 - Prone Horizontal Abduction
 - Prone Extension
 - Elbow Flexion
 - Elbow Extension
- *Patient must be able to elevate arm without shoulder or scapular hiking before initiating isotonic; if unable, continue glenohumeral joint exercises

WEEK 12:

- _Continue all exercise listed above
- _Initiate light functional activities

WEEK 14:

- _Continue all exercise listed above
- _Progress to fundamental shoulder exercises

Phase IV – Advanced strengthening phase (week 16-22):

Goals:

- _Maintain full non-painful active ROM
- _Advance conditioning exercises for Enhanced functional use of UE
- _Improve muscular strength, power, and endurance
- _Gradual return to full functional activities

WEEK 16:

- _Continue ROM and self-capsular stretching for ROM maintenance
- _Continue progression of strengthening
- _Advance proprioceptive, neuromuscular activities

WEEK 20:

- _Continue all exercises listed above
- _Continue to perform ROM stretching, if motion is not complete

Phase V – Return to activity phase (week 20-26):

Goals:

- _ Gradual return to strenuous work activities
- _ Gradual return to recreational activities
- _ Gradual return to sport activities

WEEK 23:

- _ Continue strengthening and stretching
- _ Continue stretching, if motion is tight

WEEK 26:

- _ May initiate interval sport program (i.e. golf, etc.), if appropriate