VCU Sports Medicine Clinic

Conservative rotator cuff repair protocol

This protocol is designed to serve as a patient rehabilitation guide following a massive or fragile rotator cuff repair procedure. Time frames allow for optimal healing and should be used as criteria for advancement along with a patient's functional ability.

Phase I (weeks 0-3)

Goals

- 1. Decrease pain
- 2. Protect repair; educate patient regarding rotator cuff repair precautions
- 3. Increase passive range of motion for forward flexion and scaptions (see precautions for internal rotation/external rotation)
- 4. Independent with home exercises
- 5. Initiate scapular awareness exercises

Precautions

- 1. Wear sling at all times for four weeks except during therapy/home exercise program
- 2. No active range of motion or active assistive range of motion during phase I
- 3. No passive internal rotation stretching for four weeks
- 4. External rotation stretching limited to 45 degrees only for four weeks
- 5. No strengthening for 12 weeks

Exercises

- 1. Passive range of motion for flexion, scaption and external rotation (to 45 degrees)
- 2. Grade II, III glenohumeral mobilizations anterior, inferior and posterior directions
- 3. Manual scapular resistance exercises
- 4. Codman's all directions
- 5. Active elbow flexion and extension
- 6. Gripping exercises for the hand
- 7. Cervical active range of motion, all directions
- 8. Educate family on performing passive range of motion at home as appropriate
- 9. Modalities as needed for pain

Phase II (weeks 4-12)

Goals

- 1. Decrease pain
- 2. Full passive ranges of motion, all directions
- 3. Initiate active assistive range of motion (four to six weeks) and active range of motion (six or more weeks) with patient aware of upper trapezius substitution pattern

Precautions

- 1. No active range of motion for six weeks post-op
- 2. No strengthening until 12 weeks
- 3. Avoid abnormal scapular substitution patterns with initiation of active motion

Exercises (weeks 4-6)

1. Continued passive range of motion

- 2. Initiate active assistive range of motion for flexion, abduction, external rotation and internal rotation (pulleys, wands, etc.), cueing for good scapular positioning/scapulohumeral rhythm
- 3. Perform lower extremity strengthening and cardiovascular exercises that are non-stressful to shoulder
- 4. Trunk stabilization exercises

Exercises (weeks 6-12)

- 1. Perform active range of motion for flexion and scaption with emphasis on scapular awareness to minimize the upper trap influence
- 2. Initiate active scapular retraction and prone Houston exercise
- 3. Initiate biceps and tricep strengthening with bands only
- 4. Begin using extremity for light activities of daily life

Phase III (weeks 12-24)

Goals

- 1. Full active range of motion in all planes with normal scapulohumeral rhythm
- 2. Minimal to no shoulder pain with light to moderate activities of daily life
- 3. Initiate shoulder strengthening

Precautions

All strengthening should be performed below 90 degrees until normal scapular rhythm and sufficient rotator cuff strength is achieved. Exercise bands only (no free weights) for first four weeks of strengthening.

Exercises

- 1. Continue passive range of motion and joint mobilization as needed
- 2. Initiate strengthening of deltoid, cuff and scapulothoracic musculature with exercise bands only. Can progress to free weights four weeks later if good control is present. General progression recommended:
 - a. Prone scapular program
 - b. Integrate functional patterns
 - c. Increase speed of movements
 - d. Integrate kinesthetic awareness drills into strengthening program
 - e. Progress closed chain dynamic stability activities
- 3. Initiate proprioceptive training
- 4. Initiate closed chain exercises
- 5. Initiate active proprioceptive neuromuscular facilitation (PNF) patterns concentrating on technique with gradual progression to resistive PNF patterns
- 6. Trunk stabilization/strengthening

Phase IV (6 months)

Note: At six months may begin to return to golf program, lifting, etc. as released by surgeon if sufficient strength exists.

Goals

1. Return to activities of daily life without restriction

Exercises

- 1. Stretching as needed
- 2. Continue rotator cuff and scapulothoracic and trunk strengthening program
- 3. Plymoetric medicine ball program
- 4. Initiate throwing program

5	. Initiate progressive replication of demanding activities of daily life/work activities	