



## Rotator Cuff Repair Protocol

### Overview

- a. Begin passive shoulder ROM after surgery (beginning week 1)
- b. Active assist ROM beginning week 7 after surgery (weeks 7-8)
- c. Active ROM beginning week 9 after surgery (weeks 9+)

### Weeks 0-6:

- a. Precautions:
  - i. No lifting of objects no matter the size or weight.
  - ii. No excessive shoulder extension.
  - iii. No excessive arm motions.
  - iv. Do not push thru pain with range of motion exercises.
  - v. Keep incision clean and dry.
- b. Goals:
  - i. Gradually increase full passive range of motion of the shoulder by 6 weeks post-op.
  - ii. Maintain integrity of repair.
  - iii. Promote tissue healing.
  - iv. Diminish pain and inflammation.
  - v. Prevent muscular inhibition.
- c. Bracing:
  - i. Shoulder immobilizer will be placed on patient in surgery.
  - ii. Immobilizer should be used 24/7 and removed only for hygiene and exercises for 6 weeks.
- d. Exercises:
  - i. Passive shoulder range of motion
  - ii. Passive range of motion of the involved elbow, active wrist and hand ROM.
  - iii. Supine shoulder passive range of motion in all planes.
    1. IR/ER at 45 degrees of abduction in the plane of the scapula.
    2. Therapist or caregiver is sure to give support to the arm especially when lowering the upper extremity.
  - iv. Scapular retractions.

- v. Core training:
  - 1. If patient is interested in core training, this may be started approximately 2-3 weeks after surgery assuming that passive range of motion is progressing. The exercises should place no stress on the involved rotator cuff (Immobilizer on)
  - 2. Examples:
    - a. Bridging exercise (arms folded across chest).
    - b. Ankle band walks.
    - c. Step up exercise.
    - d. Crunches.
- vi. Aerobic conditioning:
  - 1. Stationary bike.
  - 2. Avoid elliptical trainer due to stress on shoulder.
- vii. PRICE:
  - 1. Ice pack 5-7 times per day.

## II. Weeks 7-16:

- a. Goals:
  - i. Full AROM (active) of the shoulder at 8-12 weeks post-op.
  - ii. Normal scapular mechanics at 12 weeks post-op.
  - iii. Ready to begin sports specific training at 16-20 weeks post-op.
- b. Bracing:
  - i. Immobilizer is worn at night for sleep until 8 weeks post-op.
  - ii. Sling is worn for comfort during the day after six weeks and weaned from as tolerated.
- c. Exercises:
  - i. Patient may begin AAROM (active assist) of the shoulder at 6 weeks post-op assuming full PROM has been achieved.
  - ii. Patient may advance to AROM at 8 weeks post-op assuming that full AAROM has been achieved.
  - iii. Shoulder isometrics may be started at 8 weeks.
  - iv. Rhythmic stabilization drills may be started at 8 weeks.
    - 1. IR/ER at 45 degrees in the plane of the scapula.
    - 2. Flexion at 100 degrees.

- v. Shoulder scapular stabilizer and rotator cuff exercises may be started at 12 weeks assuming the following:
  - 1. The isometric strengthening has been going well.
  - 2. The patient does not demonstrate shoulder or scapular hiking with active range of motion.
- vi. Core/Lower extremity training:
  - 1. Training should not place any stress on the rotator cuff.
  - 2. Multi-planar training.
    - a. Begin with mat-based and advance to weight bearing exercises as able.
    - b. No weight bearing thru the involved shoulder until 16 weeks post-op.
    - c. Examples:
      - i. 8 weeks:
        - 1. Single leg stance/stork exercise.
        - 2. Sagittal plane lunge.
        - 3. Frontal plane lunge.
      - ii. 16 weeks:
        - 1. Quadruped leg extension.
        - 2. Prone plank.
        - 3. Quadruped arm and leg diagonals.
- d. Aerobic conditioning:
  - i. Bike.
  - ii. May start elliptical trainer or Stairmaster at 12 weeks post-op.
- e. PRICE

### III. **Weeks 17-24**

- a. Goals:
  - i. Gradual return to strenuous work activities.
  - ii. Maintain full, pain free range of motion.
  - iii. Improve upper extremity, lower extremity, and core muscular strength and power.
  - iv. Maintain integrity of rotator cuff repair.
  - v. Return to sport at 5-6 months. May take up to 12 months.
  - vi. Return to interval sports program at 5 months.

1. Patient must have met milestones:
    - a. Strength.
    - b. Mobility.
  2. Entrance into throwing program, golf program, running program.
- b. Milestones:
- i. Full active range of motion of the involved shoulder in all planes.
  - ii. Normal scapular mechanics of involved shoulder.
  - iii. Isokinetic strength testing:
    1. 80% strength on involved to uninvolved side.
  - iv. Other testing:
    - a. Weight bearing vs non-weight bearing scapular mechanics.
    - b. Upper extremity Y-balance.
    - c. Accuracy of throwing.
    - d. Lower extremity power test (vertical jump).
    - e. Medicine ball side-toss for distance.
    - f. FMS screen.
    - g. Coaching drills (ie; throwing and hitting mechanics).
- c. Exercises:
- i. Patient needs to understand that strength training cannot aggravate their rotator cuff.
    1. Upper extremity plyometrics cannot be started prior to five months.
  - ii. Exercise examples:
    1. Lower extremity strength training that is sports specific.
    2. Continued core training.
      - a. May progress core training to planks assuming that quadruped weight bearing pressure has gone well.
      - b. Incorporate physio ball exercises as able.
      - c. Multi-planar core training as able.
- d. Aerobic/anaerobic training:
- i. Begin aerobic interval and/or anaerobic interval training if appropriate for patient's sport.
- e. PRICE principles.
- f. Outcome tools
- i. PSFS: Patient Specific Functional Scale

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ii. QuickDASH