• 3-4 visits over 4-6 weeks (usually 2-3 visits)
• Emphasis is on AAROM and a high repetition, low weight free weight program
• Patient should have at least 80% full AROM for each exercise before adding/progressing weight
• Address scapular mal-positioning
• Address posterior capsule tightness if applicable
• Minimal to no pain during or after exercises, although fatigue is OK
• No passive ROM (PROM) or pulleys, unless specifically indicated by the physician

I. Modalities:

A. Ice following exercises
B. Transfrictional massage for tendonitis (if indicated by physician)
C. No phonophoresis/iontophoresis
D. Ultrasound (if indicated by physician)
E. Soft-tissue techniques (if indicated by physician)

II. Stretching/ROM (2x/day) – if limited

A. Codman’s (pendulum) exercises to warm up
B. AAROM (wand exercises) in all movements – full ROM as tolerated – accept minimal pain only!
C. Four corner stretch
D. Manual technique to address posterior capsular hypomobility - use conservatively and only if B and C fail

III. Strengthening – all exercises painfree ROM only (3x/week max)

A. Supine rotator cuff program
   1. Start against gravity and gradually progress with weights
   2. Progress to isotonics when elevation against gravity > 80 deg.
B. Isotonic exercises – strengthening exercises #1-8 as tolerated
   1. Perform with free weights only (No theraband - except IR #6)
      a. Repetitions – 20-50 reps before adding/progressing in weight
      b. Start against gravity without weight; progress as tolerated to:
         - 2 oz (dinner knife)
         - 4 oz. (tuna can)
         - 8 oz. (soup can)
         - 1 lb. weight
         - 2 lbs. weight, etc.
2. Goals:
   a. Overhead athlete: 3-5 lbs x 50 reps.
   b. General rehab candidate: 1-3 lbs x 30-50 reps.
   c. Progress weight as tolerated – painfree (examine with elbow at side, usually progress faster to higher weights)

C. Scapular stabilization exercises – #1-8 as tolerated
   1. Particular emphasis if scapulothoracic weakness or maltracking present
   2. Emphasize inferior trapezius and serratus anterior - Inhibit excessive superior trapezius

D. Subscapularis exercises - #1-3
   1. Perform 30-50 reps of each exercise
   2. Emphasis on proper technique and ensure that shoulder is not moving forward
   3. Tension of theraband for exercise #2 may be gradually increased

IV. Return To Activity:

   A. A gradual return to activity may be implemented once the activities of daily living are painfree, or a satisfactory functional capacity has been reached.
   B. Maintenance and continuation of isotonic strengthening exercises should be encouraged 1-2x/week for 3-6 months.
   C. The patient should never return to low repetition, high weight workouts.
      1. Maintain 25-30 rep work-outs

V. General Information:

   A. Emphasize improved strength via neural recruitment, tissue remodeling, and correct scapular positioning

This protocol provides you with general guidelines for the conservative rehabilitation of the patient with a rotator cuff tear (RCT). The physician will make specific changes to the program as appropriate for an individual patient.
1. **Pendulum Exercises**

Bend forward at the waist, (back parallel to ground is ideal). Allow involved arm to hang down, perpendicular to the floor. Keep arm and shoulder muscles relaxed. Move arm slowly, increasing the arc as tolerated. This technique should cause only minimal pain.

Perform ________ repetitions

______ times per day.

1. Front to back
2. Side to side
3. Clockwise circles
1. **Flexion**

Stand 1-2 feet away from a wall. Place your hand on the wall and lean slightly forward while sliding your hand up the wall, creating a stretch in your shoulder.

*Hold _____ seconds*

*Perform _____ repetitions.*

2. **Abduction, and External Rotation**

Stand in a doorway with your hand on the wall as shown. Lean forward slightly creating a stretch in your shoulder.

*Hold _____ seconds*

*Perform _____ repetitions.*
3. **External Rotation**

Stand in a doorway with your hand on the wall as shown. Turn toward the opposite side (i.e. if stretching the right shoulder turn to your left), creating a stretch in your shoulder.

Hold _____ seconds.

Perform _____ repetitions.

4. **Internal Rotation**

Stand with your back to an object, such as a counter or doorknob, placing your hand on the object. If an object of appropriate height is not available, stand with your back to a door frame and grasp the frame. Create a stretch in your shoulder by slightly bending your knees.

Hold _____ seconds.

Perform _____ repetitions.

5. **Adduction**

Stand and take your arm across your body as if reaching for opposite shoulder and back, place your hand from your opposite shoulder/arm on the elbow to gently pull your arm across your body.

Hold _____ seconds.

Perform _____ repetitions.
1. Pendulum Exercises

Bend forward at the waist, (back parallel to ground is ideal). Keep arm and shoulder muscles relaxed. Move arm slowly, increasing the arc as tolerated. This technique should cause minimal pain. Motions: Front to Back, Side to Side, Clockwise Circles, Counterclockwise Circles

Perform _____ repetitions _____ times per day.

2. Flexion in Supine

Slowly raise arm overhead, keeping elbows straight.

Hold _____ seconds.

Perform _____ repetitions _____ times per day.
WAND EXERCISES (AAROM)

3. Flexion In Standing

Keep elbow straight throughout each repetition.
Slowly push affected arm up.
Hold _____ seconds.

Perform _____ repetitions _____ times per day.

4. Extension

Keep elbow straight throughout each repetition. Slowly push affected arm back.
Hold _____ seconds.

Perform _____ repetitions _____ times per day.
5. Abduction
Keep elbow straight.
Slowly push affected arm up.
____ leading with thumb
or ____ palm facing down.
Hold _____ seconds.
Perform _____ repetitions
_____ times per day.

6. Internal Rotation
Hold wand behind you.
Slowly raise hands up then
slowly return to starting
position.

Hold _____ seconds.
Perform _____ repetitions
_____ times per day.
7. External Rotation
Place towel roll under elbow. Keep elbow bent 90°. Slowly push hand toward floor.

Hold ____ seconds.

Perform _____ repetitions _____ times per day.
8. Adduction
Holding on to the end of the wand with the right hand, right elbow slightly flexed, left hand is on the mid shaft on the wand and pulls right shoulder across the body (for exercising an involved right shoulder, reverse hands for an involved left shoulder).

Hold ____ seconds.

Perform _____ repetitions
_____ times per day.
SUPINE ROTATOR CUFF PROGRAM

These exercises are intended for the initial strengthening of acute shoulder problems, and/or long-term rehabilitation for massive rotator cuff tears and other conditions resulting in long-term severe weakness. All of the exercises should be performed with slow and controlled motion. Stay within the pain-free arc of motion. Begin with 5-10 repetitions, advancing to 30 repetitions as able. Initially performed as active range of motion, you may add weight achieving 30 repetitions. The initial amount of weight to add is 4-6 oz. Normal fatigue signs are desirable, never an increase in symptoms.

For all “Reverse Codman” exercises use your uninvolved hand to assist your arm into a vertical position (pointing toward the ceiling).
SUPINE ROTATOR CUFF PROGRAM

1. Reverse Codman’s (Supine Elevation)

Lie on your back, use your uninvolved hand to assist your arm to a vertical position (your upper arm pointed to the ceiling). Actively move your arm over head, then toward your hip, keeping your elbow straight. Stay within the range (arc of motion) that is pain free and in control of your arm. Over time gradually increase to full range of motion. May use wand for assistance and have uninvolved arm guide the movement.

Perform _____ repetitions _____ times per day.

2. Lateral Reverse Codman’s

Lie on your back, use your uninvolved hand to assist your arm to a vertical position (your upper arm pointed to the ceiling). Actively move your arm across your chest and then out to the side, keeping your elbow straight. Stay within the range (arc of motion) that is pain free and in control of your arm. Over time gradually increase to the full range of motion.

Perform _____ repetitions _____ times per day.
3. **Circumduction Reverse Codmans**

Lie on your back, use your uninvolved hand to assist your arm to a vertical position (you upper arm pointed towards ceiling). Actively rotate your arm clockwise, complete reps, then counterclockwise, keeping your elbow straight. Stay within the range (arc of motion) that is pain free and in control of your arm. Over time gradually increase circumduction range of motion.

Perform _____ repetitions _____ times per day.

4. **Shoulder Flexion (bench press)**

Lie on your back. Begin with your elbow at your side, as shown. Reach toward the ceiling, straightening your elbow as you reach (like a slow punch to the ceiling or bench press). You may use a wand for assistance and have the uninvolved hand guide the movement.

Perform _____ repetitions _____ times per day.
SUPINE ROTATOR CUFF PROGRAM

5. Scapular Protraction (punch to ceiling)

Lie on your back. Use your uninvolved hand to assist your arm into a vertical position (your upper arm pointing toward the ceiling). Reach as far toward the ceiling as possible by moving your shoulder blade toward the ceiling. Then lower your shoulder blade back to the resting position, keeping your elbow of your affected arm straight the entire time.

Perform _____ repetitions _____ times per day.

6. Modified Abduction

Lying on uninvolved side, raise involved arm to approximately 60º away from the body while keeping your elbow straight, then slowly lower it back to its resting position.

Perform _____ repetitions _____ times per day.
SHOULDER STRENGTHENING EXERCISES

General Guidelines

1. Exercises should not be painful.
2. Perform exercises slowly.
3. Maintain the correct position.
4. Warm up prior to using weights – stretching and pendulum exercises as instructed.
5. Ice after exercise for 10-20 minutes.
6. Exercise 4 days a week.

Perform _____ repetitions.

1. Flexion

Start with arm at side, thumb forward.
Raise arm to shoulder level (parallel to ground). Lower slowly to starting position.

2. Abduction

Start with arm midway between front and side of your body, thumb pointing up.
Raise arm sideways to shoulder level in scapular plane. Lower slowly.

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3. **Abduction**

Start with arm midway between the front and side of your body, thumb down. Raise arm diagonally to 45° level and lower slowly to starting position.

4. **External Rotation**

Lie on uninvolved side. Place a towel roll under elbow. Keep elbow bent at 90° squeeze shoulder blades together. Raise hand away from stomach toward the ceiling. Lower slowly to starting position.

5. **External Rotation**

Keep elbow bent at 90°. Squeeze shoulder blades together. Raise hand up. Lower slowly to starting position.

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6. **Internal Rotation with Theraband**

Place Theraband in door. Squeeze shoulder blades together. Pull hand toward stomach. Slowly return to starting position.

7. **Wall Push-Ups**

Perform standing push-ups against the wall. Progress to a counter top, then to the floor with knees bent and then floor with knees straight.

8. **Biceps Curls**

Raise hand toward shoulder with palm up. Lower slowly to starting position.
SCAPULAR STABILIZATION

General Guidelines
1. Exercises should not be painful.
2. Perform exercises slowly.
3. Maintain the correct position.
4. Ice after exercise for _____ minutes.
5. Perform _____ times per day for _____ days per week.

1. Scapular Retraction

Pull shoulder blades together and down.

Hold _____ seconds

Perform _____ repetitions.

2. Scapular Depression

Place theraband over door, squeeze shoulder blades together while pulling your arm to your side. Slowly return to starting position.

Perform _____ repetitions.
3. **Extension**

Start with your arm hanging straight down with your thumb pointing down. Raise arm backwards and slowly return to starting position.

**Perform ____ repetitions.**

4. **Horizontal Abduction**

Start with your arm hanging straight down with your thumb pointing out, raise arm out to the side to shoulder level (parallel to ground) and then slowly return to starting position.

**Perform ____ repetitions**

5. **Proprioception (Countertop)**

Place your hands on a countertop. Slowly shift weight from one side to the other while keeping your shoulder blades flat to your back.

**Perform ____ repetitions.**
6. **Proprioception (Wall)**

Stand facing a wall. Keep your shoulder blades together and down and make circles with a ball in a clockwise direction. Repeat same number of reps in a counterclockwise direction.

**Perform _____ repetitions.**

7. **Proprioception (Ball dribble)**

Stand facing the wall. Keep your shoulder blades together and down and dribble to ball off of the wall. You may advance to dribbling the ball in shapes and patterns.

**Perform _____ repetitions.**

8. **Wall Push-Ups**

Perform standing push-ups against a wall. Progress to countertop, then floor with knees bent and then floor with knees straight.

**Perform _____ repetitions.**
9. **Proprioception (Hands & Knees)**

Get on your hands and knees. Keep your shoulder blades together and down and make circles with the platform in a clockwise direction. Repeat same number of reps in a counterclockwise direction.

**Perform _____ repetitions.**
1. Wings

Place hand on stomach above belly button and just below sternum. Press hand into stomach while rotating elbow forward. Do not bend wrist or move shoulder forward.

Perform _____ repetitions.
**2. Belly Press**

Attach a theraband to a doorknob or other stable structure about waist high. Hold tightly to the other end with elbow bent at approximately 90°. Extend hand and elbow 4-6 inches away from stomach. Keeping your elbow extended from your body, rotate your arm bringing your hand into your stomach.

Perform _____ repetitions.

**3. Lift-Off**

Stand with feet square and bend slightly at the waist. Place back of hand on beltline in middle of back. Lift hand off by rotating away from body without moving elbow.

Use chair with opposite hand for support if necessary.

Perform _____ repetitions.