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Rehabilitation Protocol for Rotator Cuff Repair (Delayed Mobility Version)

General Information

Wound care

- After surgery, you will have bandages over wounds that can be removed after 48 hours for showering. It is not uncommon to have some fluid leakage, if you notice this, you may remove and replace with another bandage
- After 48 hours, wounds can be covered with band-aids or other dressings purchased from the pharmacy for the first 7 days. After that no dressing is necessary
- o Always wash hands prior to touching wound
- Showering is permitted after 48 hours, see bathing instructions below
- DO NOT get into a pool, bathtub, spa, lake, or ocean until 1-month postop
- Please contact our office immediately if you notice any of the following as these could be signs of infection:
 - Fluid leaking from wound beyond 48 hours post-op
 - Foul odor from the wound
 - Any significant redness or warmth around the wound
- o Please check your temperature if you begin to feel ill, warm, or have body chills. Contact our office immediately if your temperature is above 101 degrees or you think you may have an infection anywhere in your body. It is common to have a low temperature within the first week of surgery. Make sure to stay well hydrated as this will help minimize this
- It is common to have swelling and/or bruising after surgery and is expected. The bruising may start out black-red-purple and change to a yellowish-green color over a few weeks. The bruising may go down the arm. You also may have swelling in your hand. This will go away with time; squeezing a ball or making a fist repeatedly will help with this

Blood clots

- o Surgery may slow the blood flow in your legs, which rarely may result in a blood clot. If a clot does form, your leg will usually become swollen and painful. Walking regularly early after surgery can prevent blood clots as moving the ankle and toes frequently. You should additionally avoid crossing your legs in the initial post-op period
- Please contact our office right away if you have any leg swelling, tenderness, pain, warmth or redness

• Call 911 immediately if you begin to have any chest pain, trouble breathing, rapid breathing, sweating, or confusion as this is a sign that a blood clot may have moved to your lungs

• Activity limits

- o Deskwork when comfortable with sling
- No driving for 6 weeks
- May use arm for activities of daily living with no weight after 6 weeks
- No reaching overhead except with exercises for 12 weeks
- No reaching behind back except with exercises for 12 weeks
- No pushing/pulling except with exercises for 12 weeks
- No sports/heavy activity until therapy program is complete

• Rehab diary

• Please keep track of therapy visits and exercises done at home. Please bring this diary to each clinic visit

<u>Strategies for Independence with Activities of Daily Living (Review with Therapist)</u>

Upper body dressing

- Select loose-fitting clothing
- o Always dress operative arm first
- Use nonoperative arm to pull shirt onto the operative arm, pulling the shirt as far up the arm as possible. Use the nonoperative arm to pull the shirt over your head or behind your back and down your body. The nonoperative arm goes into the shirt last
- o Always undress the operative arm last
- Consider large shirts with buttons or zippers in the first few weeks
 following surgery or obtain sling specific shirts (www.slingshirt.com OR
 www.reboundwear.com for shirts with snaps that are easy to wear/remove
 or search "post-operative shoulder surgery shirt" on Amazon)
- Remember to keep your operative arm close to your body while assisting with buttoning or zippering
- Females may consider wearing a camisole or tank top as an alternative to a bra following surgery. If a bra is preferred, consider sports bras that zip or close in the front or a strapless bra to avoid irritation at incision site

• Lower body dressing

- Utilize your nonoperative arm to thread both feet into pants while sitting.
 Stand up to pull pants up past your hips using your nonoperative arm.
 When securing pants, the operative arm may assist, but be sure to keep it close to your body
- Consider pants with elastic

• Sling management

• Week 1-6: sling with abduction pillow at all times, removed for showering and dressing only. May remove when sitting at rest for active range of motion of the elbow, wrist and hand with arm at the side. Motion of the hand/wrist should also be performed while in the sling. When out of the house and walking around home a sling should still be worn.

- o After 6 weeks the sling can be discontinued entirely
- o Make sure your elbow remains at a 90° angle while in sling. If your hand becomes swollen, it may be a sign that your elbow is too straight and the elbow position is not 90°. Discuss additional options for edema control with your therapist

Bathing

- You may shower after 48 hours post-op, dressing can be removed for showering
- o Your arm comes out of the sling and rests at your side during the shower
- o Do not scrub the surgical site
- To wash and clean the underarm of your surgical arm, bend at the waist and let the arm passively move away from your body as you bend forward, similar to pendulum exercises
- No submerging under water in a bath, pool or hot tub until 4 weeks postop
- o Consider purchasing a bath mat for prevention of falls while showering

Grooming

 Bend forward from your trunk, similar to pendulum exercises) to move your arm away from your body for activities such as bathing, deodorant, and shaving underarms

Toileting

- Use your nonoperative arm
- o Place toilet paper on nonoperative side
- Consider using toileting aid

• Sleeping

- o Keep sling on when sleeping
- o It is preferred that you sleep on your back or in a semireclined position
- o Consider sleeping in a recliner if available

• Home management

- o Consider preparing meals and freezing them prior to surgery
- Temporarily move frequently used items from higher shelves to counter top level

Driving

- o No driving until 6 weeks post-op
- Start with low risk driving on local streets and progress to riskier freeway driving

General Guidelines

- The patient is to begin therapy at 6 weeks post op
- The patient should work with the therapist 1-3x/week until cleared by surgeon
- Please review home exercise program with patient as detailed on this guide
- Please do not add or modify any portions of this protocol without discussing with the surgeon

Phase I: Passive Range of Motion – 6-10 Weeks Post-Op

Goals

- Protect repair
- Diminish pain, inflammation, and swelling
- Set up independent home program
- Initiate passive range of motion (PROM) and start scapular control exercises

Precautions

- Week 1-6: sling with abduction pillow at all times, removed for showering and dressing only, as well as for elbow, wrist and hand exercises at home with arm at side
- Week 6-10: sling can be discontinued entirely and patient can start using arm for activities of daily living in front of the body only. The arm should not go above the level of the shoulder except when doing therapy exercises.
 - No lifting, reaching, pushing or pulling anything
 - No reaching to the side or behind the body/back
 - No using the arm to push up from a chair
- There should be no initiation of shoulder active range of motion (AROM) during this phase

PT Exercises

- Regular icing/cold therapy usage
- PROM with therapist manually assisting arm through comfortable range of motion with the patient supine. Motion should include forward elevation (FE), external rotation (ER), and abduction (ABD) all within a comfortable range. Should be performed at each therapy visit.
- Pendulums (passive)
- Scapula exercises begin at 6 weeks out of the sling. Exercises should include shrugs, depression, retraction and protraction
- Active elbow/wrist/hand ROM grasping and gripping
- Cervical, levator scapulae and pectoralis minor stretching
- Manual retrograde massage and gentle scar mobilization once healed
- Recumbent bicycle

Home (Daily Exercises)

- Pendulums 2x
- Scapula exercises daily
- Active elbow/wrist/hand ROM grasping and gripping

Phase II: Active Assisted Range of Motion - 10-14 Weeks Post-Op

Goals

Maintain reduced inflammation and pain

- Begin active assisted (AAROM)
- Update home exercise program to include AAROM

Precautions

- No active range of motion should be initiated during this period other than using the arm for activities of daily function in front of the body and the arm should not go higher than shoulder level except when doing AAROM
- Avoid any heavy lifting with the arm

• Teaching / Exercises

- Scapula exercises continued
- Supine AAROM with stick or cane: Elevation, ER, abduction (10 weeks)
- 45° upright AAROM with stick or cane: Elevation, ER, abduction (11 weeks)
- Upright AAROM with stick or cane: Elevation, ER, abduction (12 weeks)
- Manual therapy and patient mobilization exercises to improve thoracic extension and rotation
- Continued cervical stretching, mobilization, and manual therapy as indicated
- Recumbent bicycle

Home (Daily Exercises)

- Scapula exercises
- Supine AAROM with stick or cane: Elevation, ER, abduction (10 weeks)
- 45° upright AAROM with stick or cane: Elevation, ER, abduction (11 weeks)
- Upright AAROM with stick or cane: Elevation, ER, abduction (12 weeks)

<u>Phase III: Active Range of Motion – 14-18 Weeks Post-Op</u>

Goals

- Continue working on AAROM as needed and progress to AROM as tolerated
- Goal to achieve near full AROM by the end of this phase
- Update home exercises to include AROM

Precautions

- No lifting overhead
- Avoid prolonged overhead activity outside of recommended exercises
- Avoid heavy lifting
- Focus should be on achieving motion not strength

• Teaching / Exercises

- Scapular exercises continued
- Upright AROM: Elevation and abduction (avoid shoulder hiking, use uninvolved hand on shoulder or do in mirror to prevent this)
- Isometric exercises using pillow or towel: push/pull and ER/IR 10-15x for 15 sec with 30 sec rest in between
- Manual therapy and patient mobilization exercises to improve thoracic extension and rotation as indicated
- Continued cervical stretching, mobilization, and manual therapy as indicated
- May begin other aerobic training other than bike if desired (treadmill, stepmaster, elliptical with no arm involvement)

• Home (Daily Exercises)

- Scapula exercises
- Upright AROM: Elevation and abduction (avoid shoulder hiking, use uninvolved hand on shoulder or do in mirror to prevent this)
- Isometric exercises using pillow or towel: push/pull and ER/IR 10-15 reps for 15 sec with 30 sec rest in between

<u>Phase IV: Resisted Exercises – 18-22 Weeks Post-Op</u>

Goals

- Achieve and maintain full AROM
- Progress strength and improve neuromuscular control
- Start sports-specific movements towards end of phase if desired

Precautions

- No full or empty can exercises (place too much strain on shoulder)
- Progress strengthening slowly, still avoid heavy overhead lifting
- No return to sports (golf, pickleball, tennis, etc) until after this phase if progressing appropriately

• Teaching / Exercises

- Rotator cuff strengthening: Upright ER/IR (elastic bands) 10-15 reps for 3-4 sets for 3 days/week total
- Deltoid strengthening: Push/pull (elastic bands) 10-15 reps for 3-4 sets for 3 days/week total
- Scapula strengthening: standing locked elbow extension to work trapezius (elastic bands), press-up plus towards ceiling to work serratus (dumbbells), kneeling rows (elastic bands), bent over row (dumbells)10-15 reps for 3-4 sets for 3 days/week total
- Shoulder stretching: crossbody stretch, sleeper stretch, behind back towel/stick IR stretch, corner stretch 5 reps for 15 sec, daily
- Core / low back / lower extremity strengthening and conditioning as desired
- Integrate sports specific movements during rehabilitation as desired (week 14-16)
- Identify sports-specific dysfunctional movement issues if indicated (week 20-22)

Home

- Rotator cuff strengthening: Upright ER/IR (elastic bands) 10-15 reps for 3-4 sets for 3 days/week total
- Deltoid strengthening: Push/pull (elastic bands) 10-15 reps for 3-4 sets for 3 days/week total
- Scapula strengthening: standing locked elbow extension to work trapezius (elastic bands), press-up plus towards ceiling to work serratus (dumbbells), kneeling rows (elastic bands), bent over row (dumbells) 10-15 reps for 3-4 sets 3 days/week total
- Shoulder stretching: crossbody stretch, sleeper stretch, behind back towel/stick IR stretch, corner stretch 5 reps for 15 sec, daily