

**Edward S. Chang, MD** Orthopaedics and Sports Medicine

#### **OFFICE LOCATIONS**

*TUESDAY* 8100 Innovation Park Drive Fairfax, VA 22031 T 703-970-6464 F 703-970-6465

WEDNESDAY 1005 N. Glebe Rd Suite 410 Arlington, VA 22201 T 571-414-6940 F 703-970-6465

THURSDAY

FRIDAY (AM only) 6355 Walker Lane Suite 300 Alexandria, VA 22310 T 703-797-6980 F 703-797-6981

#### **CLINICAL NURSE**

Eileen Perri, BSN (703) 797-6918

# **REHABILITATION GUIDELINES**

## **ROTATOR CUFF REPAIR**

The rehabilitation guidelines are presented in a criterion based progression program. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, preinjury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions and precautions may also be given to protect healing tissues and the surgical repair/reconstruction.

## INDIVIDUAL CONSIDERATIONS:

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

#### Goals:

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- Maintain integrity of repair
- Diminish pain and inflammation
- Prevent muscular inhibition

• Independent with ADL's with modifications while maintaining the integrity of the repair

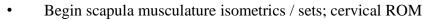
Precautions:

- 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

Biceps Tenodesis (If Applicable): Ok for early AROM of elbow 1-2 lb weight restriction

## **DAY 1 TO 6:**

- Abduction brace / sling
- Sleep in brace / sling



- 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

# DAY 7 TO 28:

• 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
  - -FIEXIOII
  - -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

# 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

# Phase II – Protection Phase (Week 4-10)

Goals:

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- Allow healing of soft tissue
  - Do not overstress healing tissue
  - Gradually restore full passive ROM (week 4-5)
  - Decrease pain and inflammation

## Precautions:

- No lifting
  - No supporting of body weight by hands and arms
  - No excessive behind the back movements
  - No sudden jerking motions

## WEEK 5-6:

- Continue use of brace / sling full time until end of week 5
- Between weeks 5 and 6 may use brace / sling for comfort only
- Discontinue brace / sling at end of week 6
- Initiate active assisted range of motion (AAROM) flexion in supine position
- Progressive passive ROM until approximately Full ROM at Week 4-5.
- This ROM should be PAIN FREE
- Gentle Scapular/glenohumeral joint mobilization as indicated to regain full passive

ROM

- Continue previous exercises in Phase I as needed
- Continue all precautions



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#### **CLINICAL NURSE**

Eileen Perri, BSN (703) 797-6918 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 6-8:

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

## Criteria for progression to the next phase (III):

Full AROM

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

#### Goals:

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- 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

#### WEEK 10:

- 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 isotonics; if unable, continue glenohumeral joint exercises



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## **WEEK 12:**

- Continue all exercise listed above
- Initiate light functional activities

#### WEEK 14:

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- Continue all exercise listed above
- Progress to fundamental shoulder exercises

#### 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.

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

Goals:

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- 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