

**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

# ARTHROSCOPIC ANTERIOR SHOULDER STABILIZATION

The intent of this protocol is to provide the therapist with guidelines of the post-operative rehabilitation course after arthroscopic anterior shoulder stabilization. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

INDIVIDUAL CONSIDERATIONS:	

# **Rehabilitation Precautions**

- Limited to 30° external rotation for 6 weeks
- Progression of ROM should not be forced and per patient's tolerance
- Return to jogging should be not initiated until 10-12 weeks depending on patient presentation

and physician clearance

- Return to sport 4-6 months; minimum of 6 months for contact sports and climbing
- Initiation of throwing program at month 4 with goal of return to game at 9-10 months (throwers)
- Refer back to surgeon with any positive apprehension testing
- No Olympic lifting or bar bench press until 6 months

<u>Progression is time and criterion-based, dependent on soft tissue healing, patient demographics, and clinician evaluation</u>

# PHASE I: Protection Phase (0-6 weeks)

All active range of motion exercises should be avoided. This relative immobilization period is critical for the healing of the soft tissues and promoting a shoulder without instability.

#### Goals

- Maximum protection of surgical repair (capsule, ligaments, labrum, sutures)
- Control inflammation and pain
- Use cryocuff 3-4 times per day
- Start PROM and achieve ROM goals: DO NOT EXCEED THEM
- Ensure adequate scapular function
- Patient education on post-op restrictions and maintaining appropriate posture

# Sling

Wear sling continuously (except for therapy and showering) for 6 weeks

## Therapeutic Exercises

- PROM of elbow, wrist, and hand
- Ball squeezes
- ROM of shoulder:
  - o goals by week 3 (PROM only)
    - Forward elevation in scapular plane of 90°
    - ER in scapular plane: week 0-2: 10°

week 3-4: 20°

week 4-6: 30°

- No ER at 90°
- IR week 0-4: none, week 4-6: to posterior belt line

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- o goals by week 6 (PROM; can start AAROM at week 4)
  - Forward elevation limited to 135°
  - IR to 50°
  - Abduction to 115°
  - ER in the scapular plane to 30°
  - ER at 90 degrees to 30°
- Start AAROM at week 4
  - Cane and wall walks with limitations to 135°
  - Pendulum exercises
- o May begin elbow AROM at week 4

## Goals to Progress to Next Phase

- Appropriate healing of surgical repair by adhering to precautions and immobilization guidelines
- Staged ROM goals achieved but not significantly exceeded
- Minimal to no pain with ROM

# PHASE 2: Intermediate Phase – Weeks 7-12

The goals by the end of the second phase of the rehabilitation process is to restore range of motion of the shoulder (both active and passive) within the limits of external rotation as determined by Dr. Chang. The main objective is to regain motion over several months because progressing too quickly may lead to recurrent instability.

## Goals

- Achieve staged ROM goals to normalize PROM and AROM do not significantly exceed
- Minimize shoulder pain
- Begin to increase strength and endurance
- Increase functional activities

# Therapeutic Exercises

- ROM of shoulder (goals by week 9):
  - o PROM
    - May perform joint mobilizations (emphasis on posterior mobility)
    - Forward elevation 155°
    - IR at 90° of abduction to 60o by Week 8-9
    - ER at side to 60°
    - ER at ninety to 75°

## o AROM

Elevation to 145°

## Strengthening

- Begin light UBE
- PRE's for scapular stabilizers (seated rows, shoulder extension, scapular retraction)
- Dynamic resistance with PNF patterns and manual techniques
- Elbow flexion/extension strengthening
- Begin CKC exercise with table/wall weight shifts

#### Weeks 10-12

- Initiation of jogging with physician clearance (typically week 12)
  - o ROM goals by Week 12
    - PROM: WNL all planes
    - AROM: Elevation WNL

# Strengthening

- Progress PREs in all planes
- o Initiate Thrower's 10 Program (sport specific to baseball and javelin)
- Rhythmic stabilization ie. prone medicine ball eccentric drops, free throws, ball taps, etc
- Progress CKC exercises

# PHASE 2: Intermediate Phase – Weeks 7-12 (continued)

## Goals to Progress to Next Phase

- Staged AROM goals achieved with minimal to no pain and without substitution patterns
- Appropriate scapular posture at rest and dynamic scapular control during ROM and strengthening exercises
- Strengthening activities completed with minimal to no pain

# PHASE 3: Advanced Activity Phase- Weeks 12-20

This phase is the functional phase of the rehabilitation protocol. We are trying to achieve aggressive strengthening exercises for the shoulder and scapular muscles. We will progress to functional activities needed for ADL's and sports

#### Goals

- Normalize strength, endurance, neuromuscular control, and power
- Gradual and planned build up of stress to anterior capsulolabral tissues
- Gradual return to full ADLs, work, and recreational activities

# Therapeutic Exercises

## Weeks 12-16

- ROM of the shoulder
  - o Terminal ER stretches at 12 weeks
  - o Self capsular stretches, AROM, and passive stretching as needed
- Strengthening
  - Advanced isotonics
  - o Initiate plyometrics (2 handed drills) ie chest pass
  - o Ball catch/toss at 90° abduction position
  - o Begin dumbbell pec exercises

## Weeks 16-20

- ROM of the shoulder
  - o May begin more aggressive stretching techniques
- Strengthening
  - o Begin overhead PRE's
  - o Begin light toss or volley (refer to Return to Throwing program)
  - o Continue with specific training program

- o Return to full activity
- o Bench press with bar at 6 months

- <u>Goals to Progress to Return to Sport</u>

  1. Progress functional activities towards return activity or sport
- 2. Enhance neuromuscular control
- 3. Improve strength, power, and endurance
- 4. Muscular strength no less than 80% of contralateral side
- 5. Full functional ROM
- 6. 5/5 scapular and rotator cuff strength
- 7. Return to sport at 4-6 months as determined by Dr. Chang