

## Altru Advanced Orthopedics

### Arthroscopic Anterior Capsulorrhaphy/Bankart Repair Protocols

The intent of this protocol is to provide the therapist with a guideline for the post-op rehab of a patient who has had an arthroscopic anterior capsulorrhaphy/Bankart repair for shoulder instability. It is not intended to be a substitute for appropriate clinical decision making regarding the progression of a patient's rehab. The actual therapy plan of care must be based on the mechanism of injury, surgical approach, physical exam and findings, individual progress, any post-op complications, and/or co-morbidities. If a therapist needs assistance or has questions regarding the progression of a patient post surgically they should consult the referring surgeon.

- If associated **biceps tenodesis** follow biceps precautions:
  - No passive or active abduction or 90/90 ER until 4 weeks
  - No resisted elbow flexion and forearm supination for 6 weeks
  - Gradual progression of AROM to strengthening after 6 weeks post-op

#### **PHASE I: Weeks 0-3**

Precautions:

- No ER past 30° for 6 weeks.
- Avoid abduction and ER activity to avoid anterior inferior capsule stress
- No lifting with operative shoulder

Goals:

- Maintain ROM of uninvolved joints
- Decrease pain and inflammation
- 90° of flexion by 4 weeks

Immobilization:

- Sling for 4-6 weeks post-op
- Exceptions: dressing, showering, exercises as instructed by PT, occasional keyboard work

Therapeutic Exercise:

1. PROM
  - Flexion: Progress 30°/week, to a max of 90° by 4 weeks
  - Scaption to 30-60°
  - ER/IR with arm in neutral to 20° abduction
    - ER to 5-10°
    - IR to 45°
  - Pendulum: emphasize passive motion
2. AAROM (start at 2 weeks post-op)

- Flexion: progress 30°/week, to a max of 90° by 4 weeks
- No active ER, extension, abduction, or scaption
- 3. AROM: Initiate when scapular control is good
  - Flexion up to 90° by 4 weeks
  - Maintain full AROM of elbow, wrist, hand
  - Small movement PNF of scapula
- 4. Isometrics: submaximal, neutral position ER, abduction, flexion, extension
  - IR and adduction begin at 6 weeks
  - Working up to 30 reps as tolerated
- 5. By week 2-3: pain free scapular motion, with emphasis on thoracic extension to facilitate scapular retraction and depression
- 6. Axially loaded exercises such as ball rolls on table

Modalities:

- Cryotherapy PRN
- NMES PRN

**Goals to Achieve for ROM by 3-4 weeks post-op:**

Flexion	0-90°
Scaption	0-60°
Abduction	0-45°
ER at 0° to 20° of ABD	0-10°
IR at 0° to 20° of ABD	0-45°

**PHASE II: 4-6 Weeks**

Precautions:

- No ER past 30° for 6 weeks
- No lifting with operative shoulder

Goals:

- Maintain ROM of uninvolved joints
- Gradually restore full PROM of shoulder
- Gradually increase strength

Immobilization:

- D/C sling at 4 weeks post-op

Therapeutic Exercise:

2. PROM
  - Progress flexion to 140-150°

- Progress ER up to 30° by 6 weeks in neutral to 45° of abduction
3. AAROM/AROM
    - Progress flexion to 150° with good scapular control
    - Progress ER up to 30° by 6 weeks
  4. Strengthening
    - Isometrics: submaximal, neutral position IR and adduction begin at 6 weeks
      - Working up to 30 reps as tolerated
    - Short arc flex and abduction 0-45°
      - Start supine or reclined and progress to seated and standing
    - Extension: 0-45°
    - Bicep/tricep isometrics, progress to isotonic
    - IR/ER from sling position to neutral
      - Begin with light Therabands/tubing
  5. Closed chain rhythmic stabilization, weight shifts, balance devices, push-ups, etc.
    - Progress elevation as tolerated in recommended ROM

Modalities:

- Cryotherapy PRN
- NMES PRN

**Goals to Achieve for ROM by 5-6 weeks post-op:**

Flexion	0-150°
Scaption	As tolerated
Abduction	As tolerated
ER at 0° to 45° of ABD	0-30°
IR at 0° to 45° of ABD	As tolerated
Extension	0-45°

**PHASE III: Weeks 7-9**

Precautions:

- Avoid strengthening activities that place stress on anterior shoulder in abducted position with ER (no push-ups, pec flies, bench-press ext.)

Goals:

- Patient will have full AROM with good scapulohumeral rhythm
- Continue with stretching as needed
- Independent with ADLs
- Progress strength and endurance

Therapeutic Exercise:

1. ROM
  - Gradually progress PROM – AROM to full

- ER should be within 10-15° of opposite side (may not achieve full AROM)
2. Stretching
    - Posterior capsule stretches
    - Sleeper posterior capsular stretch for IR deficit
    - Pec stretching
  3. Strengthening
    - Gradually progress IR and ER isotonic strengthening
    - PNF strengthening
    - UBE at 7 weeks- low resistance at a comfortable pace
    - May allow beginning level plyoball below shoulder height at 5-10 weeks, 2-1 hands
  4. Advance closed chain activities as tolerated

Modalities:

- Cryotherapy PRN
- NMES PRN

#### **PHASE IV: Weeks 10-14**

Precautions:

- Avoid strengthening activities that place stress on anterior shoulder in abducted position with ER (no push-ups, pec flies, bench-press, lat pull bringing bar behind head, etc.)
- Avoid stressing the anterior capsule with aggressive overhead strengthening
- Avoid contact sports/activities

Goals:

- Full nonpainful AROM
- Improve muscle strength and endurance
- Gradually progress activities towards full functional activities

Therapeutic Exercise:

1. ROM
  - Shoulder flexion to 160-180°
  - Shoulder ER 80-90° in 90° of abduction
    - ½ of normal side by 12 weeks post op
    - Unless dominant arm in a throwing athlete, then more ER is allowed
  - Shoulder IR 75-85° in 90° of abduction
2. Stretching:
  - Sleeper posterior capsular stretch for IR deficit
  - ER stretch at 10 weeks
3. Initiate strength exercise for abduction, supraspinatus
4. In front of body, below shoulder height, in 0° ER:
  - Light medicine ball

- Wall dribble – 2 hands to 1 hand
  - ER wall dribble
5. Rhythmic stabilization – closed chain with hand on ball progressing to open chain activities in multiple planes of movement
  6. Jog at 12 weeks

### **PHASE V: Weeks 15-18**

#### Precautions:

- Avoid strengthening activities that place stress on anterior shoulder in abducted position with ER
  - No pec/dumbbell flys bringing arm past neutral extension at the shoulder
  - No bench-press with bringing the bar down to your chest
  - No lat pull downs bringing bar behind head
- Avoid stressing the anterior capsule with aggressive overhead strengthening
- No throwing or overhead athletic activities until 16 weeks post-op

#### Goals:

- Maintain full nonpainful AROM
- Improve strength, endurance, and power
- Progress toward return to work activities, recreational activities, sport activities

#### Therapeutic Exercise:

1. ROM
  - Continue stretching exercises to maintain full ROM/flexibility
2. Progress strengthening
  - Free weights (limit depth of bench press to elbows not moving back past trunk, avoid behind neck presses and pull downs)
  - Plyometric strengthening: weighted ball Rebounder throws
  - Closed Chain Activities: table push-ups, quadruped rhythmic stabilization, steps on block
3. Recreational and Sport Activities:
  - Ball toss
  - Gentle swimming program
  - Racquet swings
  - Half golf swings

### **PHASE VI: 18 WEEKS - 6 Months**

#### Precautions:

- Avoid strengthening activities that place stress on anterior shoulder in abducted position with ER
  - No pec/dumbbell flys bringing arm past neutral extension at the shoulder
  - No bench-press with bringing the bar down to your chest
  - No lat pull downs bringing bar behind head

- Avoid stressing the anterior capsule with aggressive overhead strengthening
- Caution with throwing or overhead athletic activities

Goals:

- Maintain shoulder mobility
- Improve strength, endurance and power
- Gradual return to work activities, recreational activities, sport activities

Therapeutic Exercise:

1. ROM
  - Continue stretching/flexibility exercises
2. Strengthening
  - Isokinetics ER/IR (90/90 positioning)
  - Free weights
  - Progress scapular and RTC core exercises
  - Sport/work specific activities
3. Recreational/Sport Activities
  - Begin interval throwing program
  - Racquet and club swings
  - Begin contact and collision sports

**PHASE VII: 6+ Months**

Precautions:

- Use caution with strengthening activities that place stress on anterior shoulder in abducted position with ER
  - Avoid pec/dumbbell flys bringing arm past neutral extension at the shoulder
  - Avoid bench-press with bringing the bar down to your chest
  - Avoid lat pull downs bringing bar behind head
  - Avoid lateral raise machine and standing lateral deltoid raises
  - Avoid dips and triceps press overhead
  - Avoid pullovers

Goals:

- Return to full function
- Return to all work activities, recreational activities, sport activities
- Maintain strength, mobility, and stability

Therapeutic Exercise:

1. Strength:
  - Unlimited weight lifting with exceptions (listed above)
2. Contact and collision sports if cleared by your surgeon

**Criteria to return to recreational and sport activities:**

- **Surgeon permission**
- **Pain free shoulder function without instability**
- **Adequate ROM for activity**
- **Full strength vs opposite UE**