



## Austin Crow MD

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## Post-operative Rehabilitation Protocol SLAP Repair, Bankart Repair, or Biceps Tenodesis

### **Phase I: Protective Phase (day 1 to week 6)**

#### Weeks 0-2

- Shoulder sling x 6 weeks
- Sleep in sling x 3 weeks
- Shoulder, elbow, and hand ROM
  - **NO** resisted active isolated biceps activity (elbow flexion or forearm supination x 6 weeks)
  - **NO** active external shoulder rotation, extension, or abduction
- Hand gripping exercises
- Passive and gentle active assisted ROM exercises
  - Codmans exercises
  - Flexion and scaption to 90
  - ER to 30 x 4 weeks
  - IR to 45
  - Scapulothoracic AROM in all planes
- Submaximal isometrics for shoulder musculature

#### Weeks 3-4

- Continue shoulder, elbow, and hand ROM (as above)
  - Advance IR to 60
- **NO** active ER, extension, or elevation
- Initiate scapulothoracic isometrics
- Initiate proprioceptive training (rhythmic stabilization drills)

- Gentle submaximal shoulder isometrics
- Continue use of cryotherapy PRN

#### Weeks 5-6

- Continue to gradually improve ROM
  - Flexion and Scaption to 1450 (can progress further if tolerated)
  - ER to 50
  - IR to 60
  - Full ROM should be achieved at 8-10 weeks
- Initiate limited AROM/AAROM of shoulder to 90 flexion or abduction
- Continue submaximal shoulder isometrics
- Can begin AROM supination (no resistance/elbow flexed)
- **NO** biceps loading until week 10

#### Clinical milestones to progress to Phase II:

- Flexion to 125 (can progress further if tolerated)
- Abduction to 70
- Scapular plane IR to 40
- ER to 40

#### **Phase II: Moderate Protection Phase (Weeks 7-12)**

##### Week 7-9

- Continue to progress AROM/PROM (Full by week 10)
- Begin isotonic rotator cuff IR/ER strengthening with bands/weights
- Progressions
  - Submaximal to maximal
  - Slow speeds to fast speeds
  - Known patterns to random patterns
  - Eyes open to eyes closed
  - OKC to CKC
- Exercises
  - Scapular plane elevation
  - Side lying ER
  - Standing rotator cuff series
  - Prone horizontal abduction/extension
- Manual resistance to shoulder
- **NO** biceps loading until week 10

##### Week 10-12

- Initiate stretching exercises if ROM not full by 10 weeks
  - Flexion and scaption to 1800
  - ER at 900 abduction to 900
  - IR at 900 abduction to 790
- Begin submaximal isometrics and AROM for biceps
- Begin more aggressive exercises for rotator cuff and scapulothoracic musculature

- Continue isotonic progressive resistive exercises and manually resisted exercises
- Progress ER motion to 90/90 position
- Begin submaximal exercises above 90° of elevation

#### Clinical milestones to progress to Phase III

- Flexion to 160°
- Scapular plane ER to 65°
- Abduction to 70°
- Scapular plane IR to 40°
- ER to 40°
- ER at 90° to 45°
- Scapular plane IR full
- IR at 90° abduction to 45°
- Abduction to 150°
- Near full symmetrical posterior shoulder mobility
- 4/5 MMT for scapular/rotator cuff muscles
- AROM in appropriate ranges without pain

#### **Phase III: Minimum Protection Phase (Weeks 13-20)**

#### **NO THROWING OR OVERHEAD SPORTS UNTIL WEEK 20**

Goals:

- Full non painful AROM/PROM
- Restoration of muscle strength, power and endurance
- No pain or tenderness
- Gradual initiation of functional activities

#### Weeks 13-16

- Continue stretching exercises if needed
- Maintain full ROM
  - ER at 90° abduction up to 120° (throwers)
- Continue phase II exercise progression and principles
- Isotonic elbow flexion and forearm supination
- Can increase intensity and decrease reps
- Initiate light plyometric activities (2 handed, progressing to one)

#### Weeks 16-20

#### **NO THROWING OR OVERHEAD SPORTS UNTIL WEEK 20**

- Continue to progress resistive exercises
- Continue to progress plyometric exercises
- Continue stretching as needed

#### Clinical Milestones to progress to Phase IV

- Within 10° of full active range of motion from opposite side in all planes of motion
- Full symmetrical posterior shoulder mobility

- 5/5 isometric shoulder MMT
- 5/5 scapulothoracic and rotator cuff MMT

**Phase IV: Advanced Strengthening Phase (weeks 21-26)**

Goals:

- As above
- Progress functional activities

Weeks 21-26

- Progress interval sports programs
  - Begin throwing from mound (weeks 24-28)

September 2015