

# Rehabilitation Following Arthroscopic Anterior Shoulder Plication in the Overhead Athlete

## I. **PHASE I – IMMEDIATE GUARDED MOTION PHASE** (Weeks 0-6)

### Goals:

- Reduce postoperative pain and inflammation
- Promote capsular healing
- Retard muscular atrophy
- Controlled motion to shoulder

### **Weeks 0-2:**

- Sling and swathe for 4 weeks
- Sleep in sling for 4 weeks
- Remove sling and swathe for exercises
- AAROM with L-bar and PROM
  - Flexion to 70 degrees (week 1)
  - Flexion to 90 degrees (week 2)
  - ER in scapular plane 30 degrees abduction to 5-10 degrees
  - IR in scapular plane 30 degrees abduction to 15-20 degrees
- Pendulum exercises
- Rope and pulley to 70 and 90 degrees
- Isometrics
  - ER/IR at 0 degrees abduction
  - Shoulder flexion
  - Shoulder abduction
  - Scapular retraction
  - Rhythmic stabilization IR/ER
  - Biceps isometrics (if SLAP repair no for 6 weeks)

### **Modalities:**

- Cryotherapy for first 7-10 days

### **Weeks 3-4:**

- Continue use of sling and swathe
- AAROM and PROM exercises
  - Flexion to 90-100 degrees
  - ER at 45 degrees abduction scapular plane to 30 degrees
  - IR at 45 degrees abduction scapular plane to 45 degrees
- Continue pendulum and rope/pulley
- Muscular strengthening exercises
  - Tubing ER/IR at 0 degrees abduction
  - Continue isometrics
  - Prone rowing
  - Prone horizontal abduction (limited ROM)
  - Lower trapezius table lifts
  - Continue manual resistance RS
- Initiate proprioception drills

**Weeks 5-6:**

- Discontinue sling and swathe (week 4)
- Progress ROM overhead (above 90 degrees abduction)
- AAROM and PROM
  - Flexion to 145 degrees (week 5)
  - Flexion to 160 degrees (week 6)
  - ER at 90 degrees abduction to 70 degrees at week 6
  - IR at 90 degrees abduction to 65 degrees at week 6
- Muscular Training
  - Initiate light isotonics week 5
  - Full can (begin with 1 lb)
  - Shoulder abduction (begin with 1 lb)
  - Sidelying ER
  - Scapular strengthening
  - Continue manual resistance RS
  - Initiate light resistance CKC wall drills
- Continue proprioception drills
- Initiate case stabilization drills

**II. PHASE II – CONTROLLED MOTION PHASE (Weeks 7-16)****Goals:**

- Gradually increase ROM and flexibility
- Enhance dynamic stabilization
- Improve muscular strength and endurance
- Gradually increase applied loads

**Weeks 7-9:**

- Flexibility and ROM exercises
  - ER at 90 degrees abduction to 90 degrees (week 8)
  - IR at 90 degrees abduction to 65 degrees (week 8)
  - Full flexion 180 degrees

**Muscular Training:**

- Continue rhythmic stabilization drills (ER)
  - PNF D2 Flex/Ext with RS
  - Throwers Ten Program
    - Progress 1 lb/week if non-painful
  - Progress scapular strengthening program
  - Push-ups on ball on table RS
  - Wall stabilization onto ball into wall
  - Tubing ER with manual resistance
  - CKC drills
  - Proprioception drills
-

**Weeks 10-12:**

- Continue all exercises listed above
- Progress ER at 90 degrees abduction to 110-115 degrees at week 12
- Initiate self-capsular stretches
- Initiate 2 hand plyometrics (weeks 10-11)

**Weeks 13-16:**

- Continue all exercises listed above
- Initiate progressive resistance exercises
  - Bench press (narrow grip)
  - Pull downs (in front of body)
  - Push-ups
  - Seated rowing
  - Pectoralis flies
- Plyometrics one-hand drills/throws (week 14)
- Wall dribble with 2 lb plyoball
- Initiate hitting program (weeks 12-13)

**III. PHASE III – ADVANCED STRENGTHENING PHASE (Weeks 16-23)****Goals:**

- Progress strengthening, power and endurance
- Enhance dynamic stabilization
- Initiate overhead throwing program

**Weeks 16-20:**

- Continue all flexibility and ROM exercises
- Continue self-capsular stretches
- Continue ER/IR stretch at 90 degrees abduction
- Throwers Ten Program
- Plyometrics two-hand drills and one-hand drills
- Endurance drills
- Core stabilization drills
- \*Initiate interval throwing program (Phase I)

**Weeks 21-23:**

- Continue all the above exercises
- Initiate interval throwing program (Phase II) at weeks 21-22

**IV. PHASE IV – RETURN TO ACTIVITY PHASE (Weeks 24-32)****Goals:**

- Progress to unrestricted full activity
  - Continue/progress strengthening exercise
-

**Weeks 26-30:**

- Stretch and improve ROM and flexibility
- Throwers Ten Program
- Plyometrics two-hand – one-hand
- Progress throwing program

***Criteria for Return to Play:***

- Full non-painful ROM
  - Satisfactory isokinetic test
  - Satisfactory clinical exam
  - Completion of interval throwing program
  - Physician approval
-