



## Rehabilitation Program Following Thermal Assisted Capsular Shrinkage for Individuals With Acquired Laxity (Overhead Athlete)

**Precautions:** Wear brace at night for sleep for 2-4 weeks (will be determined by surgeon)

### **I. Phase I – PROTECTION PHASE (Day one to week 6)**

Goals: Allow soft tissue healing  
Diminish pain and inflammation  
Retard muscular atrophy

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

- Sling use for 14 days
- Sleep in sling/brace for 2-4 weeks

#### **Exercises:**

- Hand Gripping exercises
- Elbow and wrist ROM exercises
- Active ROM cervical spine
- Passive and active-assisted shoulder ROM exercises
  - Elevation to 75-90 degrees (flexion to 70 degrees week 1, flexion to 90 degrees week 2)
  - Internal rotation (IR) in scapular plane at 30-45 degrees abduction (45 degrees by week 2)
  - External rotation (ER) in scapular plane at 30-35 degrees abduction (25 degrees by week 2)
  - No aggressive stretching
  - No overhead motions
- Rope and Pulley (shoulder flexion) active-assisted ROM
- Cryotherapy to control pain (before and after treatment)
- Submaximal isometrics (ER, IR, abduction, flexion, extension)
- Rhythmic stabilization exercises at 7 days
- Proprioception and neuromuscular control drills

#### **Week 3-4**

Shoulder ROM exercises (passive ROM, active-assisted ROM, active ROM)

- Elevation to 125-135 degrees
- Internal rotation (IR) at 45 degrees abduction to 30 degrees
- External rotation (ER) at 45 degrees abduction to 40-45 degrees
- At week 4, begin ER/IR at 90 degrees abduction
  - ER at 90 degrees abduction to 45-50 degrees
- No extension
- No aggressive stretching

#### **Shoulder Strengthening Exercises:**

- Active ROM program (begin at week 3)
- Initiate LIGHT isotonic program (use 1 lb. at week 4)
- ER/IR exercise tubing (zero degrees abduction)
- Continue dynamic stabilization drills
- Scapular strengthening drills
- Biceps/Triceps strengthening

- Proprioceptive Neuromuscular facilitation D2 flex/ext manual resistance (limited ROM)
- Emphasize ER strengthening and scapular musculature
- Continue use of cryotherapy and modalities to control pain

### **Week 5-6**

Continue all exercises listed above

Progress ROM to the following:

- Elevation to 160 degrees by week 6
- ER at 90 degrees abduction (75-80 degrees) by week 6
- IT at 90 degrees abduction (60-65 degrees) by week 6
- Initiate Throwers Ten strengthening program
- Continue emphasis on ER and scapular muscles

## **II. PHASE II – INTERMEDIATE PHASE (Weeks 7-12)**

Goals: Restore full ROM (week 8)

Restore functional ROM (week 10-11)

Normalize arthrokinematics

Improve dynamic stability, muscular strength

### **Weeks7-8**

Progress shoulder ROM to the following:

- Elevation to 180 degrees
- ER at 90 degrees abduction to 90-100 degrees by week 8
- IR at 90 degrees abduction to 60-65 degrees by week 8

Continue strengthening program

- May become more aggressive with ROM progression and stretching
- May perform joint mobilization techniques

Strengthening Exercises:

- Continue Throwers Ten Program
- Continue manual resistance, dynamic stabilization drills
- Rhythmic stabilization drills
- Initiate plyometrics (two hand drills)

### **Week 9-12**

Progress shoulder ROM to the overhead athlete's demands

- Gradual progression from week 9-12
- Continue stretching into ER
- ER at 90 degrees abduction to 110-115 degrees by week 10-12
- Continue stretching program for posterior structures (IR, horizontal abduction)

Strengthening exercises at 12 weeks:

- Progress isotonic program
- Continue Throwers Ten Program
- May initiate more aggressive strengthening
  - Push ups
  - Bench Press (DO NOT allow arm below body)
  - Latissimus pull downs (IN FRONT of body)

- Single hand plyometrics throwing (initiate 14-18 days following the introduction of two hand plyometrics)
- Plyoball wall drills

### III. **Phase III – ADVANCED ACTIVITY AND STRENGTHENING PHASE (Week 12-20)**

Goals: Improve strength, power and endurance  
Improve neuromuscular control  
Functional activities

***Criteria to Enter Phase III:***

- 1) Full non-painful ROM
- 2) No pain or tenderness
- 3) Muscular Strength 80% of contralateral side

#### **Week 12-16**

- Continue all stretching exercises
- Self capsular stretches, active ROM, passive stretching
- Continue all strengthening exercises
  - Throwers Ten Program
  - Progress isotonic
  - Plyometrics
    - Two –hand drills (week 12)
    - One hand drills (week 14)
    - Throwing into plyoback 1 lb. ball (week 13)
    - Neuromuscular control/dynamic stabilization drills

#### **Week 16-22**

- Initiate interval sport program (Phase I throwing, tennis, swimming, etc) week 16
- Progress all exercises listed above
- May resume normal training program
- Continue specific strengthening exercises
- Progress interval program (throwing program to Phase II) week 22-24

#### **Week 22**

- Progress to Phase II interval throwing program or sport specific training
- Continue isotonic strengthening
- Continue flexibility and range of motion
- Continue plyometrics

### IV **PHASE IV – RETURN TO ACTIVITY (Week 26)**

Goals: Gradual return to unrestricted activities  
Maintain static and dynamic stability of shoulder joint

***Criteria to progress to Phase IV:***

1. Full functional ROM
2. No pain or tenderness
3. Satisfactory muscular strength (isokinetic test)
4. Satisfactory clinical exam

**Exercises:**

- Continue maintenance for ROM (stretching)
- Continue strengthening exercises (Throwers Ten)
- Gradual return to competition
  - Progress throwing program to game situations – month 6-7