

# Thermal Assisted Anterior Capsulorraphy (For Acquired Laxity)

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

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

### Week 0-2

- Sling use for 7-10 days
- Sleep in sling/brace for 14 days

### Exercises:

Hand gripping exercises

- Elbow and wrist range of motion exercises
- AROM cervical spine
- Passive and AAROM exercises
  - Elevation to 75-90 degrees (flexion to 70 degrees week 1, flexion to 90 degrees week 2)
  - IR in scapular plane (45 degrees by 2 weeks)
  - ER in scapular plane (25 degrees by 2 weeks)
  - NO aggressive stretching
- Rope and pulley (flexion) AAROM
- Cryotherapy to control pain (before and after treatment)
- Submaximal isometrics (ER, IR, Abd, Flex, Ext)
- Rhythmic stabilization exercises at 7 days
- Proprioception and neuromuscular control drills

### Week 3-4

- Range of motion exercises (AAROM, PROM, AROM):
  - Elevation to 125-135 degrees
  - IR, in scapular plane, full motion
  - ER, in scapular plane 45 degrees by week 4
  - At week 4, begin ER/IR at 90 degrees abduction
    - ER at 90 degrees abduction to 45-50 degrees
  - NO aggressive stretching
- Strengthening Exercises:
  - Active ROM program (begin at week 3)
  - Initiate LIGHT isotonic program (use 1 IB at week 4)



- ER/IR exercise tubing (zero degrees abduction)
- · Continue dynamic stabilization drills
- Scapular strengthening exercises
- Biceps/Triceps strengthening
- PNF 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 6 weeks
  - IR at 90 degrees abduction (60-65 degrees) by 6 weeks
- Initiate Throwers Ten strengthening program
- Continue emphasis on ER and scapular muscles

## II. PHASE II – INTERMEDIATE PHASE (Week 7-12)

Goals: Restore full ROM (week 8)

Restore functional ROM (week 10-11)

Normalize arthrokinematics

Improve dynamic stability, muscular strength

### Week 7-8

- Progress 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 stretching program
  - May become more aggressive with range of motion 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-handed drills)

### Week 9-12

- Progress ROM to the overhead athlete's demands
  - Gradual progression from week 9 to 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, Horz, Add)
- Strengthening Exercises:
  - Progress isotonic program
  - Continue Throwers Ten Program
  - May initiate more aggressive strengthening
    - Push ups
    - Bench press (DO NOT allow arm below body)
    - Lat pull downs (IN FRONT of body)
    - Single hand plyometrics throwing (initiate 14-18 days following the introduction of two hand plyos)
    - Plyoball wall drills

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

Goals: Improve strength, power, and endurance

Enhance neuromuscular control

Functional activities

### Criteria to Enter Phase III:

- 1) Full range of motion
- 2) No pain or tenderness
- 3) Muscular strength 80% of contralateral side

### Week 12-16

- Continue all stretching exercises
- Self capsular stretches, AROM, passive stretching
- Continue all strengthening exercises
  - Thrower Ten Program
  - Progress isotonics
  - Plyometrics
    - Two-hand drills progress to one-hand drills
    - Throwing into plyoback 1 lb ball (week 13)
    - Neuromuscular control/dynamic stabilization drills

### Week 16-22

- Initiate interval sport program (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 22-23

### 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 PHASE (Week 26)

Goals: Gradual return to unrestricted activities

Maintain static and dynamic stability of shoulder joint

### Criteria to Enter 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