

Therapist \_\_\_\_\_

## ***Thermal Assisted Capsulorrhaphy (For Atraumatic Congenital Instability)***

### **I. PHASE I – PROTECTION PHASE (0-8 Weeks)**

Goals: Allow healing of tightened capsule  
Begin early protected motion of the elbow, wrist, and hand  
Decrease pain/inflammation

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

Precautions:

- Sleep in immobilizer/sling for 14 days
- No overhead activities for 8-12 weeks (physician will determine)
- Avoid extensive abduction, flexion, and external rotation

Exercises:

- Gripping exercises
- Elbow flexion/extension and pronation/supination
- AROM cervical spine (stretching)
- After 10 days, active elevation may be allowed, but is not to exceed 70 degrees

#### **Weeks 2-4**

Goals: Gradual increase in range of motion  
Normalize arthrokinematics  
Improve strength  
Decrease pain/inflammation

Range of Motion Exercises:

- Active assisted exercises (pulley and L-bar)
  - Forward flexion to 90 degrees
  - Abduction to 90 degrees
  - External rotation in scapular plane to neutral at 30° abduction
  - Internal rotation at 30° abduction in scapular plane to 20°
  - No extension and no excessive ER or IR

Strengthening Exercises:

- Isometrics initiated in all planes to tolerance
- PRE's to elbow and wrist

- Scapular strengthening (isometrics)
- Rhythmic stabilization drills (neutral rotation)
- Proprioception drills and exercises

Conditioning Program For:

- Trunk
- Lower extremities
- Cardiovascular

Decrease Pain/Inflammation:

- Ice, NSAIDS, modalities

### **Weeks 4-6**

Gradual increase to full range of motion

Range of Motion Exercises:

- L-bar active assisted exercises
  - Shoulder flexion 125 degrees
  - ER scapular plane at 45 degrees abduction to 25 degrees
  - IR scapular plane at 45 degrees abduction to 35 degrees

Strengthening Exercises:

- Continue with exercises above
- Rhythmic stabilization drills
- Scapular strengthening
- Therapeutic tubing initiated (week 4)
- Active ROM exercise
- Wall stabilization (hand into wall)
- Proprioception drills

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

Goals: Full non-painful range of motion at weeks 10-12

Normalize arthrokinematics

Increase strength

Improve neuromuscular control

### **Weeks 7-8**

Range of Motion Exercise:

- L-bar active assisted exercises
  - Flexion to 145 degrees
  - ER scapular plane at 45 degrees abduction to 45 degrees

- IR scapular plane at 45 degrees abduction to 35 degrees
- Gentle ROM exercises, do not aggressively push motion
- Gradually increase to 80% of full range of motion to full by week 12

#### Strengthening Exercises:

- Continue all exercises listed above
- Initiate isotonic dumbbell and tubing program
  - Sidelying external rotation
  - Sidelying internal rotation
  - Shoulder abduction
  - Supraspinatus (full can)
  - Shoulder extension to neutral
  - Scapular retraction
  - Scapular depression
  - Scapular protraction
  - Elbow flexion/extension
  - Push-ups (wall/table)
- Continue neuromuscular control exercises for scapulothoracic joint
- Continue rhythmic stabilization drills and proprioceptive training

#### Weeks 9-12

Goals: 80% of full ROM

Continue with all exercises listed above

Continue with joint mobilization and self-capsular stretches

#### Range of Motion Exercises:

- AAROM with an L-bar
  - Flexion to 160 degrees at week 8-10
  - ER at 90 degrees abduction to 75 degrees at week 10
  - IR at 90 degrees abduction to 50-55 degrees

### III. PHASE III – DYNAMIC STRENGTHENING PHASE (Weeks 12-20) – Advanced

#### Strengthening Phase

Goals: Improve strength, power, endurance

Improve neuromuscular control

Prepare the athlete to begin to throw

#### Criteria to Enter Phase III:

- 1) Full non-painful range of motion (80% of ROM of contralateral shoulder)
- 2) No pain or tenderness

3) Strength 70% or greater compared to the contralateral side

Exercises:

- Fundamental shoulder exercises
- Continue tubing exercises for ER/IR
- Continue scapular muscle training
- Continue neuromuscular exercises
- Gradual return to recreational activities (no excessive overhead activities)
- Continue closed kinetic chain exercises

#### **IV. PHASE IV – RETURN TO ACTIVITY (Weeks 20-28)**

Goal: Progressively increase activities to prepare patient for full functional return.

Criteria to progress to Phase IV:

- Full range of motion (80% of full motion is desirable)
- No pain or tenderness
- Satisfactory strength
- Satisfactory clinical exam

Exercises:

- Continue all strengthening
- Emphasize closed kinetic chain CKC
- Initiate recreational sport (week 24-26) – physician clearance required
- Proprioception and neuromuscular control drills
- Continue scapular strengthening program