# Anterior and Posterior Capsular Shift Rehabilitation Protocol (Slow Rehabilitation program for congenitally lax patients)

# Precautions:

- Slower progression in restoring ROM
- Emphasis on Neuromuscular control, scapular position, increase resting muscular tone
- Control arm position/motion while sleeping
- No excessive motion, especially IR, horizontal abduction or adduction
- No pushing motions, push-ups for 8-10 weeks

# I. Phase I - Protection Phase (Week 0-8)

## Goals: Allow healing of sutured capsule

Begin early protected and restricted range of motion Retard muscular atrophy and enhance dynamic stability Decrease pain/inflammation

**Brace:** Patient placed in ultrasling brace in neutral rotation for 4-6 weeks (physician will make determination

## Week 0-2

# Precautions:

- 1. Sleep in brace for 4 weeks
- 2. No overhead activities for 6-8 weeks
- 3. Compliance to rehab program is critical.

# Exercises:

Wrist, hand, gripping Elbow flex/extension and pronation/supination Pendulum exercises (non-weighted) Isometrics

- Flexors, Extensors, ER, IR, ABD
- Rhythmic stabilization drills ER/IR (neutral rotation at 20 degrees abduction
- Proprioception drills Range of Motion:
  - PROM only
  - ER/IR at 20 degrees Abduction
  - ER to 10-15 degrees
  - IR to 10-15 degrees
  - Abduction to 45 degrees maximum

## Week 3-4

Goals: Control ROM

Enhance Neuromuscular control Decrease pain/inflammation

## Exercises:

Initiate Range of Motion Exercises L-Bar active assisted exercises, gentle PROM exercises IR/ER at 30 degrees scapular plane to 10-15 degrees.

- ER to 15-20 degrees
- IR to 15-20 degrees

Shoulder flexion to 60 degrees week 3-4.

Rope & Pulley Flexion to 60-70 degrees.

#### Strengthening exercises

isometrics rhythmic stabilization exercises proprioception drills scapular strengthening exercises manual drills (seated) initiate core stabilization (pelvic tilts, supine, etc.)

## Conditioning program for:

trunk lower extremities cardiovascular

#### **Decrease pain/inflammation:**

ice, modalities

## Week 5-6

Continue all exercises listed above Range of Motion Exercises L-Bar Active Assisted Exercises Gradually and slowly increase ROM Base rate of ROM progress on amount of motion and end feel ER at 40 degrees abduction scapular plane to 40 degrees at week 5 IR at 40 degrees abd scapular plan to 45 degrees Flexion to 90-100 degrees week 5-6 Strengthening exercises initiate tubing IR/ER with arm at side (limited ROM) rhythmic stabilization drills emphasize rotator cuff strengthening active full can to 70 degrees prone rowing at 0 and 45 degrees initiate hand on wall rhythmic stabilization

# Week 7-8

Control all exercises listed above Progress ROM gradually Range of Motion

- ER/IR @ 45 degrees abduction
- ER to 45 degrees
- IR to 45 degrees
- Abduction and flexion to 120-125 degrees

## II. Phase II - Intermediate Phase (Week 8-14)

Goals: Progress to 70-80% of full ROM at week 10-12 Increase strength Improve neuromuscular control

#### Week 8-10

## **Range of Motion Exercise**

L-Bar active assisted exercises at 75 degrees ABD Flexion to 145-150 degrees

ER at 75 degrees Abd to 60 degrees

IR at 75 degrees Abd to 55 degrees \*Goal: to obtain 70% (at week 10) of full ROM and allow time and patient to gain the rest

#### **Strengthening Exercises**

Initiate isotonic dumbbell program

- sidelying ER
- sidelying IR
- shoulder Abduction to 90 degrees
- supraspinatus (full can)
- latissimus dorsi prone rowing
- rhomboids horz. Abd (bent elbow)
- biceps curls
- triceps curls
- plank stabilization position

Continue tubing at 0 degrees for ER/IR Continue stabilization exercises for the glenohumeral joint Scapular strengthening and neuromuscular exercises Continue axial loading exercises

Initiate Neuromuscular Control Exercises for Scapulothoracic Joint

#### Week 11-14

Continue all exercises listed above, emphysis neuromuscular control drills, PNF stabilization drills, and scapular strengthening. Progress ROM to:

- ER at 90 degrees ABD: to 75-80 degrees (maximum)\*\*
- IR at 90 degrees ABD: to 45-55 degrees (maximum)\*\*
  \*\* ONLY if advised by physician
- Flexion to 165 170 degrees.

## III. Phase III - Dynamic Strengthening Phase (Week 14-22)

\*\*Aggressive strengthening or stretching program based on type of patient. (Therapist and/or physician will determine.

#### Week 14-17

**Goals:** Improve strength/power/endurance Improve neuromuscular control Prepare athletic patient for gradual return to sports

\*\* Criteria to Enter Phase III:

Full non-painful ROM \*\* Patient must fulfill this criteria before progressing to this phase. No pain or tenderness Strength 70% or better compared to contralateral side

# Exercises:

Fundamental shoulder exercises

\*\*Emphasis: Neuromuscular control drills, rotator cuff strengthening, scapular strengthening.

Continue tubing exercises for IR/ER at 0 degrees ABD (arm at side) Continue isotonics:

- for rhomboids and lower trapezius
- for latissimus dorsi
- for biceps
- bilateral plank rhythmic stabilization
- hand on wall rhythmic stabilization
  - Continue dumbbell exercises for supraspinatus and deltoid
  - Continue serratus anterior strengthening exercises push-ups
    floor

Continue closed kinetic chain drills Continue trunk/LE strengthening exercises Continue neuromuscular exercises and proprioception drills

## Week 18-22

Continue all exercises above Emphasis on gradual return to restricted recreational activities (no overhead sports)

## IV. Phase IV - Return to Activity (Week 22-30)

Goals: Progressively increase activities to prepare patient for full functional return

#### Criteria to Progress to Phase IV:

Full ROM No pain or tenderness Muscle strength test that fulfills criteria Satisfactory clinical exam

#### Exercise:

Continue strengthening exercises Fundamental shoulder strengthening exercises Core stabilization drills Endurance training