# PEC MAJOR REPAIR PROTOCOL DR ELRASHIDY - TRI-VALLEY ORTHOPEDICS

## Phase I (Weeks 0-4): Post-Surgical and Protection Phase

#### Goals

- > Pain and inflammation control
- > Protect repair integrity
- Gradually increase PROM

## **Precautions (Through Week 6)**

- ➤ Maintain arm in sling for 6 weeks, remove for exercise only
- ➤ No lifting, no body weight support with hands
- No shoulder abduction, forward elevation or ER
- ➤ No excessive or aggressive stretching or sudden movement

### Weeks 0 - 2

- Shoulder sling for 6 weeks
- Elbow, wrist and hand grip and AROM exercises
- Begin pendulum exercises as tolerated
- Stationary bicycle, with shoulder sling on

## Weeks 2 - 4

- Continue shoulder sling for 6 weeks
- Begin PROM forward elevation (no greater than 90°)
- Continue previous exercises, pendulums

## Phase II (Weeks 5-8): Intermdiate and Range of Motion Phase

#### Goals:

- Supine PROM flexion to 130°
- Attain full PROM and begin AAROM
- > Protect repair

## **Weeks 5 - 6**

- Continue shoulder sling for 6 weeks
- Continue previous exercises
- PROM and supine AAROM forward flexion up to 90°, with arm in adduction
- Shoulder shrugs, scapular retraction with no resistance

#### PEC REPAIR PROTOCOL -

#### Weeks 7 - 8

- Discontinue sling and continue previous exercises
- Start AAROM and pulleys as follows:
  - o Flexion  $> 90^{\circ}$
  - o Abduction and external rotation to tolerance
  - o Internal rotation and extension, arm behind back
- Submaximal isometrics (avoid shoulder adduction, IR)
- Ok to use arm with ADLs and begin gentle AROM
- Treadmill walking and Elliptical trainer without arm motion component

# Phase III (Weeks 8-16): Early strengthening

#### Goals:

- > Full and non-painful AROM
- ➤ Begin pectoralis major strengthening after 3 months
- Gradual return to functional activities

### Weeks 8 - 12

- Continue previous exercises
- AROM, AAROM through full motion
- Light theraband exercises for external rotation, abduction, extension
- Prone scapular retraction exercises, no weights
- Standing wall push-ups, no elbow flexion >90°
- Elliptical trainer, upper and lower extremities

## **Months 3 - 4**

- Continue previous exercises and maintain full ROM
- Light theraband exercises: Add internal rotation, adduction, flexion
- Push-up progression wall  $\rightarrow$  table  $\rightarrow$  chair, no elbow flexion >90°
- **Very light** resistive weight training, no pec flies, bench press or pull downs
  - ➤ No elbow flexion >90°
  - Seated rows
  - ➤ Single arm pulleys/cables for IR, forward elevation, adduction
  - Rotator cuff and periscapular strengthening
- Treadmill running
- Ball toss with arm at side, light weight

# PEC MAJOR REPAIR PROTOCOL DR ELRASHIDY - TRI-VALLEY ORTHOPEDICS

# Phase IV (Months 4-6): Advanced strengthening

#### **Months 4 - 6**

Goals: Maintain pain-free full ROM, Advance strengthening, Gradual return to functional activities

- Continue previous exercises with increasing resistance
- Overhead ball toss
- Full running program
- Swimming
- Weight training with increasing resistance
  - No bench press
  - > May start pull downs and pec flies with light resistance only

# **Phase V - Return to full activity**

#### Months 6+

- Full activities as tolerated
- Gradual return to recreational sports and/or strenuous work activities
- Continue previous exercises with increasing weight / resistance
- May perform bench press, light weight and high repetition
  - Advance weight as tolerated
  - > Recommend indefinitely avoiding high weight, low repetition

## **EXERCISES: PHASE I**

1) **Passive Supine Flexion/Forward Elevation:** Lie on your back. Grasp wrist with non-op hand and passively raise operative arm overhead. Aim to get to 90° by 3 weeks. In week 4, progress to 120°. Then full ROM after 6 weeks. Keep elbow bent and relaxed. Repeat 10 reps, 2-3 times/day





2) **Passive Pendulum Exercise**: Hold onto a chair back with non-op hand and bend forward. Let the operative arm hang down passively. Use body to passively swing arm: Forward, backward, side to side and in small circles. Repeat throughout the day as tolerated



Hany Elrashidy. MD
Sports Medicine, Arthroscopy
Department of Orthopedic Surgery
Tri-Valley Orthopedic Specialists
www.hanyelrashidymd.com