Blake Obrock, DO ORTHOPAEDIC SPORTS MEDICINE

1600 S. Coulter St, Bldg. F Amarillo Texas Phone: 806-398-3627 Fax: 806-351-7801

Post-operative Rehabilitation Protocol Rotator Cuff Repair

___ Biceps tenodesis

Most patients will start PT at 6 weeks post op

Patient will wear a sling for 6 weeks post-op Unless otherwise specified, do not begin PT until patient has seen MD for 2 week post-op visit **If biceps tenodesis – no resisted elbow flexion for 3 months post op**

PHASE I:

Days 0-14

- May remove sling for gentle pendulum exercise 2-3 times per day
- Elbow/hand gripping and ROM exercises: perform 4-6 times per day
- Cryotherapy as needed

Weeks 2-4

- PROM Flexion to 90°, Abduction to 90°, ER 30°, IR 30°, Extension 30°. (ER/IR in scapular plane, Flexion/extension at 90 ° flexion in scapular plane)
- Rhythmic stabilization drills
- Continue all isometric contractions and use of cryotherapy as needed
- Initiate scapular isometrics
- Screen posture
- May begin joint mobilizations grade I and II for pain relief/relaxation

Weeks 4-5

- PROM Flexion to 120°, Abduction to 120°, ER 30°, IR 45°, Extension 30°
- ER/IR in scapular plane and at 90° abduction
- Initiate ER/IR strengthening using exercise tubing at 0° of abduction (use towel roll under arm)
- Initiate manual resistance ER in supine in scapular plane (light resistance)
- Progress scapular strengthening
- Initiate prone rowing with arm at 30° of abduction to neural arm position
- Initiate prone shoulder extension with elbow flexed to 90°
- Continue use of ice as needed. May use heat prior to ROM exercises
- Rhythmic stabilization exercises (flexion at 45°, 90°, 100° and ER/IR at multiple angles)

Weeks 6: **Most patients will start PT at 6 weeks post op**

- Continue all exercises as above
- Advance PROM in all directions as tolerated.
- Joint mobilizations: gentle scapular/glenohumeral joint mobilization as indicated to regain full PROM
- AAROM and stretching exercises to gain full motion
- Shoulder flexion

- ER at 90° abduction
- Initiate AROM exercises
- Shoulder flexion in scapular plane to 90° of flexion
- Shoulder abduction to 90°
- Progress isotonic strengthening exercise program
- IR/ER tubing (towel under arm)
- Side-lying ER (towel under arm)
- Prone rowing at 45° abduction
- Prone horizontal abduction (flexed elbow) at 90° abduction
- Biceps curls (isotonics with very light resistance)
- Slowly progress strengthening to prevent inflammation of tendon

Criteria to advance to Phase II:

- Full PROM
- Flexion PROM: >125°
- ER PROM in scapular plan to >75° (if uninvolved shoulder PROM >80°)
- IR PROM in scapular plan to >75° (if uninvolved shoulder PROM >80°)
- Abduction PROM to >90° in scapular plane

PHASE II:

Week 7

- Maintain full ROM in all planes
- Continue dynamic stabilization drills
- Progress AROM and light strengthening program with the addition of
- ER/IR tubing
- Lateral raises to 90° of abduction*
- Full can in scapular plan to 90° elevation*
- Prone extension
- Prone serratus punch
- Elbow flexion and extension
- *Must be able to elevate arm without shoulder or scapular hiking before initiating isotonics; if unable, continue dynamic rhythmic stabilization glenohumeral joint exercises*
- Progress joint mobilizations to grades III and IV to address capsular restrictions as indicated for all shoulder girdle joints

Weeks 8-9

- Continue as above
- Initiate light functional activities if physician permits
- In pain free ROM; starting at waist level activities, progression to shoulder level activities, then overhead activities

Week 10

- Continue with all exercises listed above
- Progress to fundamental shoulder exercises
- Strengthening Exercises: addition of the following
- Standing lateral raise to 90°
- Prone Horizontal Abduction T's

- Prone Scaption Y's
- Initiate isotonic resistance (0.5kg weight) during flexion and abduction if patient exhibits non-painful normal motion without substitution patterns

Weeks 11-14

- Progress all exercises
- Continue ROM and flexibility exercises
- Stretch posterior capsule with cross body adduction stretching
- Progress strengthening program (increase 0.5kg/10 days if non-painful)
- No residual pain should be present following exercises
- May begin gradual biceps strength if biceps tenodesis

Criteria to advance to Phase III:

- Full AROM and PROM
- Pain free with all strengthening exercises
- Dynamic shoulder stability

PHASE III:

Weeks 15-20

- Continue ROM and stretching to maintain full ROM
- Self-capsular stretches
- Sleeper stretch
- Behind the back IR with towel
- Cross body stretch
- Doorway ER stretch
- Progress shoulder strengthening exercises

Fundamental shoulder exercises including:

- Diagonals with resistance band in D2 pattern
- Push up plus on wall (progress to floor)
- Dynamic hug with band
- IR at 90° with band
- Standing forward punch with band
- ER (supported and unsupported at 90°) with weight or band
- Biceps curls

Weeks 20-24

- Continue all exercises listed above
- Gradually increase resistance (patient should not exhibit pain during or after exercise and no substitution pattern)

Criteria to advance to Phase IV:

- Maintenance of full pain-free ROM
- Functional use of upper extremity
- Full muscular strength and power

PHASE IV: **Return to Activity Phase (Weeks 24-36)**

Weeks 24-26

- Continue fundamental shoulder exercise program (at least 4 times weekly)
- Continue stretching if motion is tight
- Continue progression to sport and/or work activity/participation