# Rehabilitation Following Arthroscopic Subscapularis Repair \*

<u>\*NOTE:</u> Rate of rehab progression may be altered based on acute repair v. chronic tear repair

**Precautions:** 

- 1) Excessive passive ER motion
- 2) Forceful IR movement or contraction
- 3) Excessive horizontal abduction motion
- 4) No pushing movements for 12 to 14 weeks

#### I. Phase I – Immediate Postoperative Phase

**Goals:** Protect the surgical procedure Minimize the effects of immobilization Diminish pain and inflammation Establish baseline proprioception and dynamic stabilization Control ER ROM and active IR

# Week 0-2

- Sling for comfort 4 weeks based on Physician's decision
- Wear immobilizer for sleep (4 weeks) \*\*Physician decision
- Elbow/hand ROM
- Gripping exercises
- Passive ROM and active assistive ROM (L-bar)
  - Flexion to tolerance 0-90 degrees week 1, 0-100 degrees week 2
  - IR PROM only to about 25-30 degrees by 2 weeks
  - No passive ER beyond 0 degrees
- Submaximal isometrics (Flexion, Abduction, ER)
- No IR isometrics for 6 weeks
- No biceps strengthening, no active elbow flexion for 4 weeks
- Rhythmic stabilization (ER/IR) & (Flex/Ext)
- ER/IR proprioception drills
- Cryotherapy modalities as needed

# Week 3-4

- Gradually progress ROM caution with passive ER
  - Flexion to 120-140 degrees
  - ER at 45 degrees abd scapular plane to 0 degrees
  - IR at 45 degrees abd in scapular plane to 45-60 degrees
  - Initiate light isotonics for shoulder musculature
  - Tubing for ER to neutral rotation
  - Abduction, full can, & prone rowing
  - Dynamic stabilization exercises

# Week 5-6

- Progress ROM as tolerated (progress active flexion)
  - Flexion to 160 degrees (tolerance)

- ER/IR at 45 degrees abduction:
  - IR at 45 deg of abduction to full (motion to side)
  - ER at 45 deg of abduction to 30-35 degrees
- Continue self capsular stretching (light stretching)
- Progress all strengthening exercises
  - Fundamental Shoulders or Throwers ten program
  - Continue isotonic strengthening
  - Dynamic stabilization exercises
  - Close kinetic chain exercises
    - Wall stabilization
- Progress ROM to:
  - Flexion: 165-175 degrees

#### Week 7-8

- Begin ER/IR at 90 deg of abduction (PROM light ROM)
  - o ER to 45-50 deg
  - o IR to 50-55 deg

## II. Phase II – Intermediate Phase

<u>Goals</u>: Reestablish full ROM Normalize arthrokinematics Improve muscular strength Enhance neuromuscular control

# Week 8-10

- Progress to full ROM (week 8) flexion 180 degrees, ER at 90 to 75-80 degrees, IR to 55 degrees
- Continue all stretching exercises
  - Joint mobilization, capsular stretching, passive and active stretching
- In overhead athletes, maintain 90-100 degrees ER
- Continue strengthening exercises
  - Throwers ten program (for overhead athlete)
  - Isotonic strengthening for entire shoulder complex
  - May begin light biceps and IR isotonics
  - PNF manual technique
  - Neuromuscular control drills
  - Isokinetic strengthening

#### Week 10-14

- Progress to full ROM
- Continue all flexibility exercises
- Continue all strengthening exercises
  - May begin to increase weight for biceps and IR
- May initiate light isotonic machine weight training (week 14)

## III. Phase III – Advanced Strengthening Phase (Months 4-6)

**Goals:** Enhance muscular strength, power and endurance Improve muscular endurance Maintain mobility

# Criteria to Enter Phase III

- 1) Full range of motion
- 2) No pain or tenderness
- 3) Satisfactory stability
- 4) Strength 70-80% of contralateral side

#### Week 14-20

- Continue all flexibility exercises
  - Self capsular stretches (anterior, posterior, and inferior)
    - Maintain ER flexibility
- Continue isotonic strengthening program
- Emphasis muscular balance (ER/IR)
- Continue PNF manual resistance
- May continue plyometrics
- Initiate interval sport program (physician approval necessary) week 16

#### Week 20-24

- Continue all exercise listed above
- Continue and progress all interval sport program (throwing off mound)

## IV. Phase IV – Return to Activity Phase (Months 6-9)

<u>Goals</u>: Gradual return to sport activities Maintain strength and mobility of shoulder

#### Criteria to Enter Phase IV

- 1) Full non-painful ROM
- 2) Satisfactory stability
- 3) Satisfactory strength (isokinetics)
- 4) No pain or tenderness

## Exercises

- Continue capsular stretching to maintain mobility
- Continue strengthening program
- Either throwers ten or fundamental shoulder exercise program
- Return to sport participation (unrestricted)