

# MEDIUM ROTATOR CUFF REPAIR ( $1CM \le 5 CM$ ) ARTHROSCOPIC WITH BICEP TENODESIS

# Phase I – Protective Phase (Weeks 0 - 6)

## **Goals:**

- Maintain integrity of repair
- Gradual increase in PROM
- Gradual increase in shoulder strength
- Decrease pain and inflammation

## **Precautions:**

- No lifting of objects
- No excessive shoulder extension, stretching or sudden movements
- No supporting of body weight on hands
- No active bicep flexion x 6weeks

#### Weeks 0-2:

- Sling or brace (determined by physician) for 5 weeks
- Perform elbow/hand/wrist ROM exercises (elbow extension with gravity; passive assisted elbow flexion)
- Perform PROM to tolerance:

Flexion

ER/IR in scapular plane

• AAROM:

Pendulum exercises

Flexion to

ER/IR to in scapular plane

• Strengthening:

Rhythmic Stabilization drills

Flexion/Extension at 90-100° of flexion in supine

ER/IR in scapular plane

Sub-maximal/pain-free isometrics (all with bent elbow):

Abduction

ER/IR

Extension

Pain control modalities

# **Weeks 3 – 4:**

- PROM to tolerance (full PROM by 4-5 weeks)
- AAROM:

Flexion to

ER/IR to tolerance in scapular plane

ER/IR to 45° at 90° abduction

Active assisted bicep flexion

# Strengthening:

Tubing ER @ 0° abduction

Isotonics (light):

Prone rows to neutral arm position

Prone horizontal abduction

## Weeks 5 – 6:

- Discontinue brace or sling;
- Continue PROM and stretching to maintain full PROM
- AAROM:

Flexion to tolerance

ER/IR to tolerance in scapular plane

ER/IR to tolerance at 90° abduction

• AROM:

Flexion to 90°

Full elbow flexion against gravity (week 6)

• Strengthening:

Continue tubing ER @ 0° abduction

Continue isotonics (light):

Prone rows to neutral arm position

Prone horizontal abduction

Bicep flexion

• Upper extremity cycle

# Phase II – Intermediate Phase (Weeks 7 – 12)

## Goals:

- Full, non-painful A/PROM (week 10)
- Gradual improvement of strength and power
- Gradual return to light functional activities

#### Weeks 7 – 10:

- Maintain full PROM and progress to full AAROM
  - Strengthening:

Continue/progress rhythmic stabilization drills

Continue tubing ER at 0° abduction working on endurance

Tubing scapular strengthening to neutral working on endurance

Isotonics (gradually progress resistance):

Flexion to 90<sup>0</sup> (no resistance until AROM is without hiking)

ER/IR in side lying

Prone rows

Prone horizontal abduction

Triceps

Begin light resistance bicep (week 8): 1-2 lbs

#### Weeks 10 – 12:

- Maintain full AAROM and progress to full AROM
- Strengthening:

Continue isotonic/tubing and stabilization strengthening

Closed chain stabilization drills

# Phase III – Advanced Strengthening Phase (Weeks 13 – 20)

## Goals:

- Maintain full, non-painful ROM
- Improve shoulder complex strength and neuromuscular control
- Gradual return to functional activities

## Weeks 13 – 20:

- Maintain PROM, AAROM and AROM
- Initiate self capsular stretches if shoulder is tight
- Begin advancement of bicep resistance to tolerance
- Strengthening:

High-speed isokinetics for ER/IR in neutral

Begin general shoulder strengthening with precautions:

Latissimus pulls with narrow grip and arms in front of body

Chest press with light dumbbells keeping elbows anterior to shoulder

Machine rows

Military press with light dumbbells and arms in front only

• Plyometric program (2 handed → 1handed) at 16 weeks

# Phase IV – Return to Activity Phase (Weeks 21 – 28)

## Goals:

- Maintain shoulder ROM, strength and neuromuscular control
- Gradual return to recreational sport activities
- Gradual return to strenuous occupational activities

# Weeks 21 – 24:

- Continue flexibility, strength, stabilization and plyometric exercises
- Isokinetic strength test for ER/IR in neutral at 180°/ sec and 300°/sec
- Initiate interval sport program

# Weeks 24 – 28:

- Continue flexibility, strength, stabilization and plyometric exercises
- Continue with interval sport program and progress to return to play when released

# Criteria for return to play:

- Physician approval
- Satisfactory ROM
- Satisfactory strength test
- Satisfactory clinical exam
- Satisfactory completion of interval sport program