Arthroscopic SLAP Type IV Repair with Biceps Tenodenosis (SLAP Lesion debridement not repair)

Precautions:

1: No isolated biceps brachii contraction for 3 months

- 2. No heavy lifting overhead for 3 months
- 3. No carrying heavy objects on surgical side for 3 months

I. <u>Phase I – Immediate Postoperative Phase</u> "Restrictive Motion" (Day 1 to Week 6)

Goals: Protect the anatomic repair.

Prevent negative effects of immobilization. Restore dynamic stability. Diminish pain and inflammation.

Week 0-2:

- Sling for 3-4 weeks
- Sleep in immobilizer for 4 weeks
- Elbow/hand ROM
- Hand gripping exercises
- Passive and gentle active assistive ROM exercise
 - Flexion to 90 degrees (Week 2: Flexion to 100 degrees)
 - Elevation in scapular plane to 90 degrees (first week)
 - ER/IR with arm in scapular plane at 45 degrees abduction to tolerance
 - ER to tolerance (caution with biceps pain)
 - IR to 45 degrees
 - **NO active Flexion
- Submaximal isometrics for shoulder musculature (except shoulder flexion)
- NO isolated Biceps Contractions
- Cryotherapy, modalities as indicated

Week 3-4:

- Discontinue use of sling at 3-4 weeks
- Sleep in immobilizer until Week 4
- Continue gentle ROM exercises (PROM and AAROM)
 - Flexion to 145-160 degrees to tolerance
 - Abduction to tolerance
 - ER in scapular plane at 45° abd to tolerance
 - IR in scapular plane at 45° abd to 55-60 degrees
 - At week 3 begin ER/IR at 90° of abduction to tolerance
 - **NOTE: Rate of progression based on evaluation of the patient.
- No active elevation
- Initiate rhythmic stabilization drills (ER/IR) at 45 deg abduction
- Initiate proprioception training
- Tubing ER/IR at 0 degrees Abduction
- Continue isometrics
- Initiate scapular strengthening exercises
- Continue use of cryotherapy
- No isolated biceps

Week 5-6:

- Gradually improve ROM
 - Flexion gradually restore full flexion
 - ER at 90 degrees abduction gradually return to full ROM
 - IR at 90 degrees of abduction -gradually to full ROM
- May initiate light stretching exercises
- Continue tubing ER/IR (arm at side)
- Initiate Active Shoulder Abduction (without resistance)
- Initiate "Full Can" Exercise (Weight of Arm)
- Initiate Prone Rowing, Prone Horizontal Abduction (with elbow bent)
- NO Biceps Strengthening

II. Phase II – Intermediate Phase: Moderate Protection Phase (Week 7-14)

<u>Goals</u>: Gradually restore full AROM (week 8-10). Preserve the integrity of the surgical repair. Restore muscular strength and balance. Gradually return to low level functional activities.

Week 7-9:

- Gradually progress ROM:
 - Flexion to 180 degrees
 - ER at 90 degrees abduction: 90-95 degrees
 - IR at 90 degrees abduction: 70-75 degrees
- Continue to progress isotonic strengthening program
- Initiate PNF strengthening
- Initiate Throwers Ten Program or Fundamental Shoulder Exercises
- Emphasize posterior cuff strengthening and scapular strengthening
- Progress scapular strengthening program
- Initiate triceps strengthening

Week 10-12:

- May initiate slightly more aggressive strengthening
- Progress isotonic strengthening exercises
- Continue all stretching exercises **Progress ROM to functional demands (i.e. overhead athlete) if appropriate
- Continue all strengthening exercises
- Week 12 Initiate isometric biceps contractions

III. Phase III – Minimal Protection Phase (Week 13-20)

<u>Goals</u>: Establish and maintain full ROM. Improve muscular strength, power and endurance. Gradually initiate functional activities. Gradual return to full functional activities.

Criteria to enter Phase III:

- 1. Full non-painful ROM
- 2. Satisfactory stability
- 3. Muscular strength (good grade or better)
- 4. No pain or tenderness

Week 14-16:

- Continue all stretching exercises (capsular stretches)
- Maintain Throwers Motion (Especially ER) if appropriate
- Continue strengthening exercises:
 - Throwers Ten Program or Fundamental Exercises
 - PNF Manual Resistance
 - Endurance training
 - Initiate light plyometric program week 16
 - Restricted sport activities (light swimming, half golf swings)
 - Initiate isolated elbow isotonics (light then progress slowly to heavier wts)

Week 17-20:

- Continue all exercise listed above
- Continue all stretching
- Continue Throwers Ten Program
- Continue Plyometric Program
- Initiate interval sport program (throwing, etc) if appropriate **See interval Throwing Program

IV. Phase IV - Advanced Strengthening Phase (Week 20-26)

<u>Goals</u>: Enhanced muscular strength, power and endurance. Progress Functional activities. Maintain shoulder mobility.

Criteria to enter Phase IV:

- 1. Full non-painful ROM
- 2. Satisfactory static stability
- 3. Muscular strength 75-80% of contralateral side
- 4. No pain or tenderness

Week 20-26:

- Continue flexibility exercises
- Continue isotonic strengthening program
- PNF manual resistance patterns
- Plyometric strengthening
- Progress interval sport programs

V. Phase V – Return to Activity Phase (Month 6 to 9)

<u>Goals</u>: Gradual return to sport activities. Maintain strength, mobility and stability.

Criteria to enter Phase V:

- 1. Full functional ROM
- 2. Muscular performance isokinetic (fulfills criteria)
- 3. Satisfactory shoulder stability
- 4. No pain or tenderness

Exercises:

- Gradually progress sport activities to unrestrictive participation
- Continue stretching and strengthening program