

ARTHROSCOPIC THERMAL CAPSULAR SHRINKAGE WITH SUBACROMIAL DECOMPRESSION

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

<u>Goals</u>: Protect the anatomic repair Prevent negative effects of immobilization Prevent bursal adhesions and articular contractors Promote 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 60 degrees (Week 2: Flexion to 90 degrees)
 - Elevation in scapular plane to 60 degrees (first week)
 - ER/IR with arm in scapular plane at 45 degrees abduction
 - ER to 10-15 degrees
 - IR to 45 degrees
 - **NO active ER or Extension or Abduction
- 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 125-135 degrees
 - Abduction to tolerance
 - ER in scapular plane at 45° abd to 25-30 degrees
 - IR in scapular plane at 45° abd to 55-60 degrees
 - At week 4 begin ER/IR at 90° of abduction to tolerance
 - **NOTE: Rate of progression based on evaluation of the patient.
- No active ER, extension or excessive elevation
- Initiate rhythmic stabilization drills
- 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 to tolerance (at least 160 degrees)
 - ER at 90 degrees abduction: 45-50 degrees
 - ER at 90 degrees abduction: 60-75 degrees at end of week 6
- May initiate 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
- NO Biceps Strengthening

II. <u>Phase II</u> – <u>Intermediate Phase</u>: Moderate Protection Phase (Week 7-14)

<u>Goals</u>: Gradually restore full ROM (week 8-10) Preserve the integrity of the surgical repair Restore muscular strength and balance

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
 - Initiate inferior glides joint mobilization technique to prevent subacromial scarring
 - Continue to progress isotonic strengthening program
- Initiate PNF strengthening
- Initiate Throwers Ten Program
- Emphasize posterior cuff strengthening and scapular strengthening

Week 10-12:

- May initiate slightly more aggressive strengthening
- Progress ER to Throwers Motion
 - ER at 90 degrees abduction: 110-115 degrees in throwers (Week 10-12)
- Progress isotonic strengthening exercises
- Continue all stretching exercises
 **Progress ROM to functional demands (i.e. overhead athlete)
- Continue all strengthening exercises

III. Phase III – Minimal Protection Phase (Week 14-20)

<u>Goals</u>: Establish and maintain full ROM Improve muscular strength, power and endurance Gradually initiate 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)
- Continue strengthening exercises:
 - Throwers Ten Program or Fundamental Exercises
 - PNF Manual Resistance

- Endurance training
- Initiate light plyometric program
- Restricted sport activities (light swimming, half golf swings)

Week 16-20:

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