

SUPERIOR CAPSULAR RECONSTRUCTION

GENERAL GUIDELINES / PRINCIPLES

- Wear sling at all times except showering and while doing exercises / physical therapy for 8 weeks or per physician's discretion.
- No exercises specifically for the shoulder while a pain pump is present.
- Patient should receive only minimal stress to the rotator cuff for 8 weeks. It is usually advisable to schedule patients only once or twice weekly during this period of time to ensure proper progression and patient education.
- Once the sling is removed it is necessary to stress the importance of avoiding heavy lifting, pushing, or pulling by the patient for at least 6 months to allow proper tissue healing.
- This protocol, as well as most others, is a general guideline. Patients should not be progressed to the next phase until they demonstrate proper form with all activities and all criteria are met in the current phase.
- When clinically appropriate, properly assess the whole body and incorporate treatment for loss of mobility and stability. Not doing so can prevent optimal outcomes and increase risks of future injuries.

MAXIMUM PROTECTION PHASE (Day 1 – Week 7)

- **Goals:**
 - Protect repair and promote healing.
 - Diminish pain and inflammation.
 - Gradually increase passive range of motion
 - Minimize muscle atrophy
- **Precautions**
 - No resisted lifting, pulling, or pushing motions
 - Avoid excessive stretching or sudden movements
 - Keep incisions dry and clean
- **Treatment (Days 1-14)**
 - Pendulum exercises (4-6 x daily)
 - Elbow/hand ROM and gripping exercises.
 - Active scapular control exercises in sling
 - Gentle, pain-free ROM:
 - Passive IR/ER in scapular plane to tolerance
 - Week 2 = 30 degrees
 - Passive Flexion to tolerance
 - Week 1 = 90 degrees
 - Week 2 = 120 degrees
 - Rhythmic stabilization drills for ER/IR with elbow supported in scapular plane
 - Gentle AAROM exercises
 - T-bar ER/IR with elbow supported in scapular plane
 - Sub-maximal, non-painful isometrics

- Flexion
- IR/ER
- Cryotherapy (3-4 x daily), modalities as indicated.

- **Treatment (Days 15 – 28)**

- Continue pendulums and submaximal shoulder isometrics
- Initiate cervical spine stability and thoracic spine mobility as needed
- Gentle, pain-free ROM
 - Goals by end of week 4
 - Passive Flexion to at least 135 degrees
 - Passive ER at 90 deg ABD to at least 45 degrees
 - Passive IR at 90 deg ABD to at least 45 degrees
- Progress AAROM Exercises
 - T-bar ER/IR at 90 deg ABD
 - Begin T-bar flexion to tolerance with PT assistance
 - Pulley flexion in scapular plane
 - Table flexion slides
- Continue rhythmic stabilization drills
 - ER/IR in scapular plane
 - All directions at 100 deg flexion

- **Treatment (Weeks 5-7)**

- Continue all previous exercises as needed
- Gradually improve PROM/AAROM
 - Passive / pain-free flexion to 160 degrees
 - Passive / pain-free ER
 - 45 degrees ABD = 60 degrees
 - 90 degrees ABD = 75 degrees
 - Passive / pain-free IR
 - 45 degrees ABD = 60 degrees
 - 90 degrees ABD = 45 degrees
- Initiate:
 - Prone row to neutral
 - ER/IR strengthening utilizing tubing in 0 degrees abduction
 - Sidelying forward flexion and abduction
- Continue core strengthening along with cervical, thoracic spine and postural treatments as needed

MODERATE PROTECTION PHASE (Weeks 8-12)

- **Goals:**

- Continue to protect healing tissues
- Diminish pain and inflammation
- Range of Motion:
 - Full PROM by Weeks 8-10
 - Full AROM by Weeks 10-12
- Restore dynamic shoulder stability
- Gradual return to light recreational and functional activities as permitted by physician at Week 12
 - Ex: Jogging program, modified gym program with shoulder safety as primary concern

- **Treatment (Weeks 8 - 9)**

- Continue all previous exercises as needed
- Progress rhythmic stabilization drills to more challenging ranges
- Progress scapular stability program
- Initiate:
 - Prone isotonic extension
 - Sidelying horizontal abduction
 - Sidelying external rotation
 - Seated and/or standing Scaption
 - Patient must not demonstrate scapular hiking in order to progress forward flexion/Scaption
 - Biceps Curls
- Continue use of cryotherapy.

- **Treatment (Weeks 10-12)**

- Continue all previous AROM and AAROM exercises as needed to maintain ROM
- May begin to work on gentle behind the back stretches to tolerance
- Initiate:
 - Upper Body Ergometer
 - Prone horizontal abduction
 - Supine PNF patterns – light manual and band-resistance as tolerated
 - Interval walk/run program as tolerated (Physician discretion)

MINIMAL PROTECTION AND INTERMEDIATE STRENGTHENING PHASE (Weeks 13-20)

- **Goals:**

- Maintain functional PROM and mobility
- Gradual restoration of shoulder stability, strength and power

- **Criteria to Progress**

- Full, pain-free PROM
- 4/5 pain-free MMT in all ranges
- Pain-free IADL performance

- **Treatment (Weeks 13-16)**

- Continue all stretching and ROM activities in order to main full, functional mobility
- Gradually progress resistance for isotonic exercises
- Initiate:
 - Progressive closed-kinetic chain stability exercises
 - Static carry variations (i.e., farmer's carry, suitcase carry) with progressive loading

- **Treatment (Weeks 17-20)**

- Continue all previous strengthening exercises as needed
- Progress home exercise and gym program and schedule formal physical therapy 1-2 x per week
- Progress closed-kinetic chain exercises for appropriate candidates

ADVANCED STRENGTHENING PHASE (week 21-24)

- **Criteria to Progress:**
 - Pain-free functional AROM required for previous activities
 - Pain-free 5/5 manual muscle testing
- **Goals:**
 - Maintain full, functional AROM
 - Improve muscular strength, endurance, and power.
 - Gradually return to more demanding functional activities.
- **Treatment (Weeks 21-24)**
 - Continue ROM and stretching exercises to maintain full ROM including self-capsular mobilizations as needed
 - Continue to progress to advanced strengthening exercises
 - Interval Golf Program
 - Golfers may putt, chip, and pitch during this phase (MD discretion)
- **Treatment (Week 25-36)**
 - Continue all previous strengthening exercises
 - Initiate
 - UE plyometric program for overhead and contact athletes
 - May initiate interval throwing or other sports program upon successful completion of pain-free plyometric progression

DISCHARGE TESTING / PLANNING (Month 9 to 12)

- Based on a patient's age, sex, specific sport / activity, and level (i.e. recreational, amateur, professional) that they are returning to, a decision is made to endorse their return to sport or to ask that the patient refrain from doing so. Currently we strive for the following criteria before fully endorsing going back to rigorous activities:
 - Demonstrate quality and symmetrical movement throughout the body evaluated with comprehensive movement screen or assessment process
 - Symmetrical and acceptable comprehensive scores on CKC UE testing
- Not all patients who have undergone superior capsular reconstruction are candidates for functional testing. Those undergoing these tests should be chosen with proper consideration given to what they plan to return to and their general fitness level.
- No matter how well a patient is doing with return to sport testing it is prudent to remember how important time is to full healing and safe return to sport / activity.
- Often times, patients are scheduled periodically during the phase in which they are trying to return to sport / higher level activities to assess their progress and properly change their program until they are deemed safe to return to all activities.