

Multidirectional Instability Protocol

Phase I- Maximum Protection

Weeks 0 to 3:

- Wear sling (strap around waist) or shoulder immobilizer at all times
- No glenohumeral joint range of motion for 3 weeks

Goals

- Reduce pain and inflammation
- Protect surgical repair
- Postural education

Exercise progression

- No GHJ ROM x 3 weeks
- Cervical ROM and basic deep neck flexor activation (chin tucks)
- Elbow, hand and wrist AROM
- Active shoulder retraction
- Encourage walks and low intensity cardiovascular exercise to promote healing

Phase II- Passive/Active Assisted Range of Motion

Weeks 3 to 6:

- Wear sling (strap around waist) or shoulder immobilizer at all times
- Initiate passive and active assisted range of motion at 3 weeks within range of motion restrictions
- Initiate isometric muscle activation at 4 weeks

Goals

- Reduce pain
- Protect repair
- Postural education
- PROM/AAROM restrictions:
 - Week 3: flexion 0-90 degrees, abduction 0-90 degrees, external rotation 0-30 degrees at neutral, internal rotation progress as tolerated
 - Week 4: flexion 0-120 degrees, abduction 0-90 degrees, external rotation 0-30 degrees at neutral and 30 degrees abduction, internal rotation progress as tolerated
 - Week 5: flexion progress as tolerated, abduction 0-90 degrees, external rotation 0-45 degrees at neutral, internal rotation progress as tolerated

Manual therapy

- Graded glenohumeral and scapulothoracic mobilizations
- STM to shoulder and cervicothoracic complex
- Passive range of motion
- Gentle sub-maximal therapist directed isometrics at 4 weeks

Exercise progression

- Supine and upright AAROM using cane, T-bar, pulleys, etc. within range of motion restrictions
- DNF and proper postural positioning with shoulder retraction
- Low to moderate intensity cardiovascular work

Phase III- Progressive Range of Motion/Active Range of Motion

Weeks 6 to 8:

- Discontinue sling/immobilizer at 6 weeks
- Progress PROM and AAROM at shoulder

- Initiate AROM at shoulder

Goals

- Progress range of motion
- PROM/AAROM/AROM restrictions:
 - Week 6: flexion progress as tolerated, abduction 0-120 degrees, external rotation 0-45 degrees at neutral and 45 degrees abduction, internal rotation progress as tolerated
 - Week 7: flexion progress as tolerated, abduction 0-120 degrees, external rotation progress as tolerated, internal rotation progress as tolerated
 - Week 8: progress as tolerated in all directions

Manual therapy

- Graded glenohumeral and scapulothoracic mobilizations
- Scar tissue mobilization when incisions are healed
- STM to shoulder and cervicothoracic complex

Exercise progression

- Initiate UE arm bike (shoulder flexion less than 90 degrees)
- Open chain serratus activation
- Prone scapular series less than 90 degrees (rows, T's and I's)
- External rotation against gravity (no resistance)
- Painfree sub-max 6 direction rotator cuff isometrics
- Low to moderate intensity cardiovascular work (able to perform elliptical)

Phase IV- Progressing Range of Motion and Strengthening

Weeks 8 to 12:

- Progress to full PROM and AROM
- Normalize glenohumeral and scapulothoracic arthrokinematics
- Initiate strengthening phase with resistance
- Initiate closed kinetic chain exercises with focus on scapular and core stabilization

Goals

- Full ROM in all directions by 10-12 weeks
- Progress strength of limb
- Core and scapular stabilization

Manual therapy

- PROM and mobilizations to achieve full range of motion in all directions
- PNF patterns
- Manual perturbations in supine with arm at 90 degrees flexion and ER/IR at neutral
- Rhythmic stabilization and perturbations in quadruped for scapular and core strengthening- bilateral progressing to unilateral/tripod position

Exercise progression

- Progress scapular series above 90 degrees
- Progress serratus punches and scapular series by adding resistance as tolerated
- Initiate resisted strengthening
- Initiate posterior capsular stretching (sleeper stretch) and functional IR stretch (HBB) at 10 weeks
- Emphasis on scapular and core stability with open and closed kinetic chain exercises for proximal muscular control

Phase V- Advanced Strengthening and Plyometric Drills

Weeks 12 to 24:

- Full ROM with protection at end range 90/90

- Follow up examination with physician at 6 months for release to full activity
- Initiate plyometric drills at 12-14 weeks
- Sport specific drills

Goals

- Full range of motion
- Core and scapular stabilization
- Advance gym strengthening program
- Progress to sport demands

Manual therapy

- STM and joint mobilization to glenohumeral, scapulothoracic and cervicothoracic as needed
- Manual perturbations
- PNF patterns

Exercise progression

- Full ROM in all planes with protected end range 90/90
- Advance gym strengthening program maintaining respect for repaired tissue
- Initiate plyometric and rebounder drills at 12-14 weeks starting with double hand and progressing to single hand
- Initiate interval throwing program and sport specific drills at 18-22 weeks for nondominant arm and 22-24 weeks for dominant arm
- Continue to emphasize and progress scapular and core stability in open and closed kinetic chain exercises for proximal muscular control

Criteria for return to play:

- Full, pain-free range of motion
- Normal glenohumeral and scapulothoracic arthrokinematics
- >90% MMT using handheld dynamometer
- Full progression through interval throwing program

Anticipated return to sports:

- 6-9 months for nonthrowing and throwing athlete