

Non-Operative Rehabilitation Atraumatic Shoulder Instability

The program will vary in length for each individual depending on several factors:

1. Severity of symptoms
2. Chronicity of instability symptoms
3. Age and Activity Level of Patient
4. ROM/Strength Status
5. Desired Goals and activities

I. **PHASE I - ACUTE MOTION PHASE**

Goals: Re-establish non-painful range of motion
Retard muscular atrophy / Establish voluntary muscle activity
Decrease pain/inflammation
Reestablish muscle balance
Improve proprioception

**** Note:** During the early rehabilitation program, caution must be applied in placing the capsule under stress (i.e. stretching into ABD, ER) until dynamic joint stability is restored. It is important to refrain from activities in extreme ranges of motion early in the rehabilitation process.

- **Decrease Pain/Inflammation:**
 - Sling for comfort as needed
 - Therapeutic modalities (ice, electrotherapy, etc.)
 - NSAID's
 - Gentle joint mobilizations (grade I-II) for pain neuromodulation
** Do not stretch capsule*
- **Range of Motion Exercises:**
 - Gentle ROM only, no stretching
 - Pendulums
 - Rope & Pulley
 - Elevation in scapular plane to tolerance
 - Active-assisted ROM L-Bar to tolerance
 - Flexion
 - Internal Rotation with arm in scapular plane at 30° abduction
 - External Rotation with arm in scapular plane at 30° abduction
 - Progress to 45° and 90° abduction

**** DO NOT PUSH INTO ER OR HORIZONTAL ABDUCTION ****

- **Strengthening/Proprioception Exercises:**
 - Isometrics (performed with arm at side)
 - Flexion
 - Abduction
 - Extension
 - Internal Rotation (multi-angles)

- External Rotation (scapular plane)
- Biceps
- Scapular retract/protract, elevate/depress
- Rhythmic Stabilizations
 - ER/IR in scapular plane
 - Flex/Ext at 100° abduction, 20° horizontal abduction
- Weight Shifts (CKC Exercises) – scapular plane
- Joint reproduction proprioceptive drills

II. PHASE II - INTERMEDIATE PHASE

Goals: Regain and improve muscular strength
Normalize arthrokinematics
Enhance proprioception & kinesthesia
Improve neuromuscular control of shoulder complex

Criteria to Progress to Phase II:

1. Full Passive ROM (except ER)
2. Minimal Pain or Tenderness
3. "Good" MMT of IR, ER, Flexion, and Abduction
4. Baseline proprioception and dynamic stability

- **Initiate Isotonic Strengthening**
- **Emphasis on External Rotation and Scapular Strengthening**
 - ER/IR Tubing
 - Scaption with ER (Full Can)
 - Abduction to 90 degrees
 - Side lying external rotation to 45 degrees
 - Shoulder shrugs
 - Prone Extension to Neutral
 - Prone Horizontal Adduction
 - Prone Rowing
 - Lower trapezius
 - Biceps
 - Table Push-ups
 - Triceps
- **Improve Neuromuscular control of Shoulder Complex**
 - Initiation of proprioceptive neuromuscular facilitation
 - Rhythmic stabilization drills
 - ER/IR at 90 degrees abduction
 - Flexion/Extension/Horizontal at 100° Flexion, 20° horizontal abduction
 - Progress to mid and end range of motion
 - Progress OKC program
 - PNF
 - Manual resistance ER (supine → sidelying), prone row
 - ER/IR tubing with stabilization
 - Progress CKC exercises with rhythmic stabilizations
 - Wall stabilization on ball
 - Static holds in push-up position on ball
 - Push-ups on tilt board
 - -Core
 - Abdominal strengthening

- Trunk strengthening / Low back
- Gluteal strengthening
- **Continue Use of Modalities** (as needed)
 - Ice, electrotherapy modalities

III. PHASE III - ADVANCED STRENGTHENING PHASE

Goals: Improve strength/power/endurance
Improve neuromuscular control
Enhance dynamic stabilizations
Prepare patient/athlete for activity

Criteria to Progress to Phase III:

1. Full non-painful range of motion
 2. No palpable tenderness
 3. Continued progression of resistive exercises
 4. Good – normal muscle strength
- **Continue use of modalities (as needed)**
 - **Continue isotonic strengthening (PRE's)**
 - Continue all exercises listed above
 - Progress to end range stabilization
 - Progress to full ROM strengthening
 - Progress to bench press in restricted ROM
 - Program to seated rowing and lat pull down in restricted ROM
 - **Emphasize PNF**
 - **Advanced neuromuscular control drills (for athletes)**
 - Ball flips on table
 - End range RS with tubing
 - Push-ups on ball/rocker board with rhythmic stabilizations
 - Manual scapular control drills
 - **Endurance training**
 - Timed bouts of exercises – 30-60 seconds
 - Increase number of repetitions
 - Multiple bouts throughout day (3x)
 - **Initiate plyometric training**
 - 2-hand drills:
 - Chest pass
 - Side to side
 - Overhead
 - Progress to 1-hand drills:
 - 90/90 throws
 - Wall dribbles

**** PRECAUTION IS AVOIDING EXCESSIVE STRESS ON CAPSULE ****

IV. PHASE IV - RETURN TO ACTIVITY PHASE

Goals: Maintain optimal level of strength/power/endurance
Progressively increase activity level to prepare patient/athlete for full functional return to activity/sport

Criteria to Progress to Phase IV:

1. Full ROM
 2. No pain or palpable tenderness
 3. Satisfactory isokinetic test
 4. Satisfactory clinical exam
- **Continue all exercises as in Phase III**
 - **Initiate Interval Sport Program (As appropriate)**
 - **Continue Modalities** (as needed)

FOLLOW-UP

- Isokinetic Test
- Progress Interval Program
- Maintenance of Exercise Program