Multi-Directional Instability

This multi-phased program is designed to allow the patient/athlete to return to their previous functional level as quickly and safely as possible. Each phase will vary in length for each individual depending upon the severity of injury, ROM/strength deficits, and the required activity demands of the patient.

**PHASE I – ACUTE PHASE**

**Goals:**
- Decrease pain/inflammation
- Re-establish functional range of motion
- Establish voluntary muscular activation
- Re-establish muscular balance
  - Improve proprioception

**Decrease Pain/Inflammation**
- Therapeutic modalities (ice, electrotherapy, etc.)
- NSAIDS
- Gentle joint mobilizations (Grade 1 and II) for neuromodulation of pain

**Range of Motion Exercises**
- Gentle ROM exercises – no stretching
- Pendulum exercises
- Rope and pulley Elevation to 90 degrees, progressing to 145/150 degrees flexion
- L-Bar
- Flexion to 90 degrees, progressing to full ROM
- Internal rotation with arm in scapular plane at 45 degrees abduction
- External rotation with arm in scapular plane at 45 degrees abduction
- Progressing arm to 90 degrees abduction

**Strengthening Exercises**
- Isometrics (performed with arm at side)
- Flexion
- Abduction
- Extension
- External rotation at 0 degrees abduction
- Internal rotation at 0 degrees abduction
- Biceps
- Scapular isometrics
- Retraction/protractions
- Elevation/depression
- Weight shifts with arm in scapular plane (closed chain exercises)
- Rhythmic stabilizations (supine position)
- External/external rotation at 30 degrees abduction
- Flexion/extension at 45 and 90 degrees flexion

**Note:** It is important to refrain from activities and motion in extreme ranges of motion early in the rehabilitation process in order to minimize stress on joint capsule.
II. **PHASE II – INTERMEDIATE PHASE**

**Goals:** Normalize arthrokinematics of shoulder complex  
Regain and improve muscular strength of glenohumeral and scapular muscle  
Improve neuromuscular control of shoulder complex  
Enhance proprioception and kinesthesia

**Criteria to Progress to Phase II:**
Full functional ROM  
Minimal pain or tenderness  
“Good” MMT

**Initiate Isotonic Strengthening**
Internal rotation (sidelying dumbbell)  
External rotation (sidelying dumbbell)  
Scaption to 90 degrees  
Abduction to 90 degrees  
Prone horizontal abduction  
Prone rows  
Prone extensions  
Biceps  
Lower trapezius strengthening

**Initiate Eccentric (surgical tubing) Exercises at Zero Degrees Abduction**
Internal rotation  
External rotation

**Improve Neuromuscular Control of Shoulder Complex**
Rhythmic stabilization drills at inner, mid, and outer ranges of motion (ER/IR, and Flex/Ext)  
Initiate proprioceptive neuromuscular facilitation  
Scapulothoracic musculature  
Glenohumeral musculature  
Open kinetic chain at beginning and mid ranges of motion  
PNF  
Manual resistance  
External rotation  
Begin in supine position progress to sidelying  
Prone rows  
ER/IR tubing with rhythmic stabilization  
Closed kinetic chain  
Wall stabilization drills  
Initiated in scapular plane  
Progress to stabilization onto ball  
Weight shifts had on ball  
Initiate core stabilization drills  
Abdominal  
Erect spine  
Gluteal strengthening

**Continue Use of Modalities (as needed)**
Ice, electrotherapy
III. **PHASE III – ADVANCED STRENGTHENING PHASE**

**Goals:**  
Enhance dynamic stabilization  
Improve strength/endurance  
Improve neuromuscular control  
Prepare patient for activity

**Criteria to Progress to Phase III:**  
Full non-painful ROM  
No pain or tenderness  
Continued progression of resistive exercises  
Good to normal muscle strength

**Continue Use of Modalities (as needed)**

**Continue Isotonic Strengthening (PRE's)**  
Fundamental shoulder exercises II

**Continue Eccentric Strengthening**

**Emphasize PNF Exercises (D2 pattern) With Rhythmic Stabilization Hold**

**Continue to Progress Neuromuscular Control Drills**  
Open kinetic chain  
PNF and manual resistance exercises at outer ranges of motion  
Closed kinetic chain  
Push-ups with rhythmic stabilization  
Progress to unsteady surface  
Medicine ball  
Rocker board  
Push-ups with stabilization onto ball  
Wall stabilization drills onto ball

**Initiate Isokinetics**  
Abduction/adduction  
Internal/external rotation

**Program Scapular Neuromuscular Control Training**  
Sidelying manual drills  
Progress to RS and movements (quadrant)

**Emphasize Endurance Training**  
Time bouts of exercise 30-60 sec  
Increase number of reps  
Multiple bouts bouts during day (TID)
IV. **PHASE IV – RETURN TO ACTIVITY PHASE**

**Goals:** Maintain level of strength/power/endurance
Progress activity level to prepare patient/athlete for full functional return to activity/sport

**Criteria to Progress to Phase IV:**
- Full non-painful ROM
- No pain or tenderness
- Satisfactory isokinetic test
- Satisfactory clinical exam

Continue all exercises as in Phase III

Initiate Internal Sport Program (if appropriate)

Patient Education

Continue Exercise on Fundamental Shoulder Exercise II