#### Brandon M. Tauberg, M.D.

Orthopaedic Sports Medicine Surgeon Arthroscopic and Shoulder Surgery www.brandontaubergmd.com

# Non-Operative Anterior Shoulder Instability Protocol

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

- 1. Severity of injury
- 2. Acute vs. chronic condition
- 3. ROM/strength status
- 4. Degree of shoulder instability/laxity
- 4. Performance/activity demands

The program is outlined in 4 phases. It is possible to overlap phases (Phase 1-2) depending on individual progress. During early rehab (Phase 1 and Phase 2) caution must be applied to avoid undue stress on the anterior shoulder capsule (i.e. ABD/ER) as dynamic joint stability is restored. Phase 3 will focus on preparing return to prior activity level. Let pain and apprehension be a guide.

## PHASE I -ACUTE MOTION PHASE

- Goals:
  - o Re-establish non-painful ROM
  - o Help prevent muscular atrophy
  - o Decrease pain/inflammation
- Decrease Pain/Inflammation
  - o Therapeutic modalities (ice, electrotherapy, etc.)
  - o NSAIDs
  - o GENTLE joint mobilization
- Range of Motion Exercises
  - o Passive, active-assistive motion.
    - Initially, avoid abduction, extension, and external rotation
    - Slowly progress motion to 90/90 position guided by pain and apprehension
    - Shoulder hyperextension is CONTRAINDICATED
  - o Pendulums
  - o Circumduction
  - o Rope & Pulley
  - o Flexion Abduction to 90°, progress to full ROM
  - o L-Bar
- Flexion, Abduction, IR with arm in scapular plane, ER with arm in scapular plane, Progress arm to 90° of abduction as tolerated
- o Posterior capsular stretching
- Strengthening Exercises
  - o Isometrics
    - Flexion, Abduction, Extension, IR (multi-angle), ER (scapular angle)
  - o Weight shifts
- Criteria to Progress to Phase II
  - o Full range of motion
  - o Minimal pain or tenderness

## PHASE II -INTERMEDIATE PHASE

- Goals
- o Regain and improve muscular strength
- o Normalize arthrokinematics
- o Improve neuromuscular control of shoulder complex
- Initiate Isotonic Strengthening

- o Flexion, Abduction to 90°, Internal rotation, Side-lying external rotation to 45 degrees, Shoulder shrugs, Extension, Horizontal adduction, Supraspinatus, Biceps, Push-ups
- Initiate Eccentric (resistance band) Exercises at 0° Abduction
  - o Internal/External rotation
- Normalize Arthrokinematics of the Shoulder Complex
  - o Continue joint mobilization
  - o Patient education of mechanics of activity/sport
- Improve Neuromuscular Control of Shoulder Complex
  - o Initiation of proprioceptive neuromuscular facilitation
  - o Rhythmic stabilization drills
  - o Continue use of modalities (as needed)
  - o Ice, electrotherapy modalities
- Criteria to Progress to Phase III
  - o Full non-painful ROM
  - o No palpable tenderness
  - o Continued progression of resistive exercises
    - Continue use of modalities (as needed)
    - Continue posterior capsular stretches
    - Continue isotonic strengthening (PREs)

#### PHASE III -ADVANCED STRENGTHENING PHASE

- Goals
- o Improve strength/power/endurance
- o Improve neuromuscular control
- o Prepare patient/athlete for activity
- Continue Eccentric Strengthening
  - o Initiate isokinetics
    - Flexion/extension
    - Abduction/adduction
    - Internal/external rotation
    - Horizontal ABD/Adduction
- Initiate Plyometric Training
  - o Resistance bands
  - o Wall push-ups
  - o Medicine ball
- Initiate Military Press
- PRECAUTION: avoid maneuvers stressing anterior capsule
- Criteria to Progress to Phase IV
  - o Full ROM
  - o No pain of palpable tenderness
  - o Satisfactory isokinetic test
  - o Satisfactory clinical exam

## PHASE IV -RETURN TO ACTIVITY PHASE

- Goals:
  - o Maintain optimal level of strength/power/endurance
  - o Progressively increase activity level to prepare patient/athlete for full functional return to activity/sport
- Continue All Exercises as in Phase III
- Continue Posterior Capsular Stretches
- Initiate Interval Program
- Continue Modalities