REHABILITATION GUIDELINES FOR THE OVERHEAD ATHLETE TO IMPROVE DYNAMIC STABILITY

PHASE I – BASELINE STABILIZATION

Goals:
- Diminish pain and inflammation
- Improve posterior flexibility
- Re-establish dynamic stability (muscular balance)
- Re-establish muscular control
- Improve scapula position, strength, and control

Modalities:
- Cryotherapy to posterior capsule/ cuff
- Iontophoresis (Empi Hybresis)
- Electrical stimulation

Flexibility:
- Sleeper stretch
- IR stretch @ 90° ABD
- Horizontal ADD w/ IR stretch
- Shoulder flexion and ER ROM (gentle stretch)

Exercises:
- Emphasize muscle balance (unilateral muscle ratios)
- Rotator cuff strengthening (esp ER)
  - Thrower’s Ten
- Scapular strengthening exercises
  - Prone exercises on table and physioball
- Dynamic stabilization exercises
  - ER/IR t-band w/ manual resistance and rhythmic stabilization
  - Manual resistance side-lying ER w/ end ROM rhythmic stabilization
  - Manual resistance prone rowing w/ end ROM rhythmic stabilization
- Proprioceptive training
- Closed kinetic chain
  - push-up position rhythmic stabilization at mid ROM
ball on wall in scapular plane w/ rhythmic stabilization

- Monitored Rehabilitation System- ER/IR neuromuscular program
- Seated neuromuscular control drill
- Push-ups on plyoball w/ rhythmic stabilization / tilt board perturbations

**Avoidance:**
- Abstain from throwing (as advised by physician)

**PHASE II – INTERMEDIATE PHASE**

**Goals:**
- Progress strengthening exercises
- Restore muscular balance (ER/IR)
- Enhance dynamic stability
- Maintain flexibility and mobility
- Improve core stabilization

**Flexibility:**
- Control stretches and flexibility exercises
- Sleeper stretch
- Horizontal ADD w/ IR stretch

**Exercises:**
- Progress strengthening exercises
  - Thrower’s Ten exercises
- Initiate core stabilization program
- Implement LE strength program
- Dynamic stability
  - Seated ER t-band on physioball w/ manual resistance and rhythmic stabilization @ end ROM
  - Prone scapular exercises on physioball w/ trunk extension (performed bilaterally)
  - Planks on plinth
  - Planks on physioball
  - Manual resistance rowing w/ rhythmic stabilization
  - Seated neuromuscular control drill on physioball and contralateral knee extension
  - Body Blade activities for endurance
  - Single leg stance on foam w/t-band ER/IR
  - Weighted cross motion while single leg stance on foam
  - PNF D2 flexion/extension w/ rhythmic stabilization @ 45°, 90°, 145°
  - PNF D2 seated on physioball
  - Side-lying scapula neuromuscular control drill
- Initiate 2 hand plyometrics
  - Chest pass soccer throw
PHASE III – ADVANCED STRENGTHENING

Goals:
- Aggressive strengthening program
- Progress neuromuscular control
- Improve strength, power, endurance
- Initiate light throwing activities

Exercises:
Continue all exercises and stretches previously listed
- Thrower’s Ten progressing to advanced throwers 10
- Manual resistance
- Dynamic stability drills
  - Seated physioball ER/IR t-band @ 0° ABD w/ manual resistance and rhythmic stabilization
  - Seated physioball ER/IR t-band @ 90° ABD w/ manual resistance and rhythmic stabilization
  - Planks on table
  - Bilateral UE support w/ rhythmic stabilization
  - Unilateral UE support w/ rhythmic stabilization
  - Unilateral UE support w/ LE movement and rhythmic stabilization
  - Continue Monitored Rehabilitation System for ER/IR
- Plyometrics
  - Continue 2 hand drills
  - Initiate 1 hand drills
  - Wall dribble (30-60 sec bouts)
  - Plyometrics throw at 90°/ 90°
  - Baseball motion throw to Plyoback w/ 1 lb. ball (10–12 feet)
- Initiate light interval throwing
- Stretch post exercise

Phase IV – Return to activity phase

Goals:
- Continue strengthening / advanced throwers 10 and flexibility exercises
- Progress to Interval Throwing Program
- Return to competitive throwing

Exercises:
• Stretching and flexibility drills
• Thrower’s Ten program
• Plyometric program
• Dynamic stability drills
• Progress to phase I interval throwing program
• Progress to appropriate phase II interval throwing program
• Gradual progression to competitive throwing