
Rehabilitation of the Overhead Athlete: Phases and Goals

I. Phase I -- Acute Phase

Goals: Diminish pain and inflammation
Normalize Motion
Delay muscular atrophy
Reestablish dynamic stability (muscular balance)
Control functional stress/strain

Exercises and modalities:

- Cryotherapy, iontophoresis, ultrasound, electrical stimulation
- Flexibility and stretching for posterior shoulder muscles to improve shoulder internal rotation and horizontal adduction
- Rotator cuff strengthening (especially external rotator muscles)
- Scapular muscles strengthening (especially retractor and depressor muscles)
- Dynamic stabilization exercises (rhythmic stabilization)
- Weight bearing exercises
- Proprioception training
- Abstain from throwing

II. Phase II - intermediate phase

Goals: Progress strengthening exercises
Restore muscular balance
Enhance dynamic stability
Control flexibility and stretches

Exercises and modalities

- Continue stretching and flexibility (especially shoulder internal rotation and horizontal adduction)
- Progress isotonic strengthening
 - Complete shoulder program
 - Thrower's Ten program
 - Rhythmic stabilization drills
 - Initiate core lumbopelvic region strengthening program
 - Initiate leg lower extremity program

III. Phase III - advanced strengthening phase

Goals: Aggressive strengthening
Progress neuromuscular control
Improve strength, power, and endurance

Exercises and modalities

- Flexibility and stretching
- Rhythmic stabilization drills
- Advanced Thrower's Ten program
- Initiate plyometric program
- Initiate endurance drills
- Initiate short-distance throwing program

IV. Phase IV - return to activity phase

Goals: Progress to throwing program
Return to competitive throwing
Continue strengthening and flexibility drills

Exercises

- Stretching and flexibility drills
- Thrower's Ten program
- Plyometric program
- Progress interval throwing program to competitive throwing