Non-Operative Shoulder Impingement Treatment Protocol

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Purpose & Philosophy

Shoulder impingement is most often a functional problem involving rotator cuff overload, scapular dyskinesis, and altered shoulder mechanics rather than isolated structural damage. Non-operative treatment focuses on restoring motion, strength, and load tolerance while reducing pain.

Appropriate Candidates

Athletes and active individuals with subacromial pain, preserved shoulder stability, no full-thickness rotator cuff tear, and symptoms related to overhead or repetitive activity.

Phase 1: Symptom Control & Mobility (Weeks 0–2)

Goals include pain reduction, restoration of motion, and avoidance of provocative overhead loading. Activities are modified to reduce painful arcs. Rehabilitation emphasizes gentle range of motion, posterior capsule mobility, scapular positioning, and early rotator cuff activation. Pain control includes acetaminophen and ice; NSAIDs may be used selectively if appropriate.

Phase 2: Strength Restoration & Scapular Control (Weeks 2–6)

Focus shifts to restoring rotator cuff endurance, scapular stability, and balanced shoulder mechanics. Exercises target the posterior cuff, periscapular musculature, and trunk control. Progression is guided by pain and movement quality.

Phase 3: Advanced Strengthening & Load Progression (Weeks 6–10)

Goals include improving load tolerance and preparing the shoulder for higher-demand activity. Progressive resistance, closed-chain exercises, and controlled overhead patterns are introduced. Attention is paid to fatigue, scapular mechanics, and symptom response.

Phase 4: Return to Sport or Full Activity (Weeks 10–14+)

Gradual return to sport-specific or occupational activities is initiated. Overhead athletes follow a structured progression emphasizing volume control and recovery. Progression is symptom-guided rather than time-based.

Return-to-Activity Criteria

Full, pain-free shoulder range of motion; symmetric rotator cuff and scapular strength; ability to tolerate sport- or work-specific demands without symptom recurrence; confidence in shoulder function.

Failure of Non-Operative Treatment

Persistent pain, loss of function, or inability to progress despite appropriate rehabilitation should prompt reassessment, advanced imaging, or consideration of additional interventions.

Key Principles

Shoulder impingement is rarely a single-structure problem. Successful non-operative care depends on restoring mechanics, controlling workload, and addressing the entire kinetic chain.

Key References

Neer CS. Impingement lesions. Clin Orthop Relat Res. 1983.

Lewis JS. Rotator cuff related shoulder pain. Br J Sports Med. 2016.

Michener LA et al. Shoulder impingement syndrome. J Orthop Sports Phys Ther. 2003.

Kuhn JE. Exercise in the treatment of rotator cuff impingement. J Shoulder Elbow Surg. 2009.