

Acromioclavicular Joint Osteoarthritis Rehabilitation Protocol

This physical therapy protocol for shoulder acromioclavicular (AC) joint osteoarthritis focuses on managing pain, maintaining and improving range of motion, increasing strength around the shoulder complex, and improving function. AC joint osteoarthritis is characterized by the degeneration of the cartilage within the joint, leading to pain and stiffness in the shoulder, particularly when lifting the arm overhead or performing cross-body movements.

Phase 1: Pain Management and Mobility Restoration

- **Goal:** Reduce inflammation and pain, and begin to restore mobility.
- **Duration:** 1-3 weeks, depending on symptoms.
- 1. **Rest and Activity Modification:** Avoid activities that exacerbate symptoms, such as heavy lifting or overhead activities.
- 2. **Cold Therapy:** Apply ice to the AC joint for 15-20 minutes several times a day to reduce pain and inflammation.
- 3. **Gentle Mobility Exercises:** Begin with gentle, pain-free range of motion exercises for the shoulder, such as pendulum exercises and passive arm lifts with the support of the other arm or a pulley system.
- 4. **Manual Therapy:** Soft tissue massage and gentle mobilization techniques performed by a physical therapist to improve mobility and decrease pain.

Phase 2: Strengthening and Flexibility

- **Goal:** Improve strength and flexibility of the shoulder girdle.
- **Duration:** 3-6 weeks, with progression based on individual response.
- 1. **Isometric Exercises:** Start with isometric exercises for the rotator cuff and scapular stabilizing muscles, which involve contracting the muscles without moving the joint.
- 2. **Scapular Strengthening:** Exercises to strengthen scapular stabilizers, such as scapular retraction and depression exercises, to improve shoulder blade positioning and function.
- 3. **Flexibility Exercises:** Gentle stretching exercises for the shoulder, focusing on improving the range of motion. This may include stretches for the pectoral muscles, trapezius, and latissimus dorsi.
- 4. **Rotator Cuff Strengthening:** Begin with low-resistance rotator cuff strengthening exercises using resistance bands or light weights, focusing on external and internal rotation.

Phase 3: Advanced Strengthening and Functional Integration

- **Goal:** Return to normal activities and prevent further degeneration.
- **Duration:** 6 weeks and beyond, as needed.
- 1. **Advanced Strengthening Exercises:** Progress to more challenging exercises that integrate the whole upper extremity, including exercises that mimic daily or sport-specific activities.
- 2. **Functional Training:** Focus on training that replicates daily activities or sports-specific movements, gradually increasing the complexity and intensity of exercises.



Michael C. Fu, MD, MHS

Sports Medicine & Shoulder Surgery
523 E 72nd St, New York, NY 10021
P: (212) 606-1991 F: (917) 260-4578

3. **Proprioception and Balance Training:** Include exercises that challenge shoulder stability and proprioception, such as dynamic movements with resistance bands or throwing and catching exercises with a lightweight ball.
4. **Education:** Guidance on posture, ergonomics, and joint protection techniques to minimize stress on the AC joint during daily activities and prevent further degeneration.

Throughout All Phases

- **Pain Management:** Utilize pain management strategies as needed, including the application of heat or cold, and the use of over-the-counter pain relief medications, following a healthcare provider's advice.
- **Joint Protection:** Learn and apply joint protection techniques to reduce strain on the AC joint during activities.
- **Monitor Symptoms:** Regularly assess pain and mobility, adjusting the intensity and type of exercises as needed to avoid exacerbating symptoms.

This protocol should be customized based on the individual's progress, pain levels, and specific functional goals. Regular follow-up between the patient and the therapist is essential to ensure that the exercises are being performed correctly and to adjust the treatment plan as necessary.