

Orthopedic Surgery, Sports Medicine & Arthroscopy Specialists

Jonathan Watson, MD <u>REHABILITATION PROTOCOL-Shoulder Arthroscopy</u>

The rehabilitation guidelines are presented in a criterion based progression program. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions, and precautions may also be given to protect healing tissues and the surgical repair/reconstruction. It should not be a substitute for one's clinical decision making regarding the progression of a patient's post-operative course based on their physical exam findings, individual progress, and/or the presence of post-operative complications. The therapist should consult the referring physician with any questions or concerns.

Special attention must be given to impairments that caused the initial problem. For example, if the patient is s/p partial medial meniscectomy and they have a varus alignment, post-operative rehabilitation should include correcting muscle imbalances or postures that create medial compartment stress.

INDIVIDUAL CONSIDERATIONS: S/p

Phase 1- Surgery to 3 weeks (sooner if all criteria met)

| REHAB GOALS | Reduce pain and swelling in the post-surgical shoulder Regain full PROM/AAROM Activation of the stabilizing muscles of the gleno-humeral and scapulo-thoracic joints |
|---------------------------------------|---|
| PRECAUTIONS | Avoid activities that may impinge on the denuded bone of the acromion Use sling as needed for comfort Relative rest to reduce inflammation |
| RANGE OF MOTION EXERCISES | Shoulder AATOM/PROM: codmans, pulleys, cane exercises in all planes of motion except horizontal adduction (these should stay relatively pain free) Elbow, forearm and wrist AROM Cervical spine and scapular AROM |
| SUGGESTED THERAPEUTIC EXERCISES | Begin 7 days post op, sub-maximal shoulder isometrics for IR/ER, flex/ext & abd/add Shoulder AATOM/PROM: codmans, pulleys, cane exercises in all planes of motion except horizontal adduction (these should stay relatively pain free) Gentle shoulder mobilizations as needed Hand gripping |

| | Postural exercises |
|----------------|--|
| | |
| CARDIOVASCULAR | Walking, stationary bike (Avoid running and jumping due to the distractive forces that can occur at landing) |
| EXERCISE | distructive forces that can occur at fanang, |
| PROGRESSION | The patient can progress to Phase II when they have achieved full |
| CRITERIA | PROM and 5/5 strength for IR/ER at side |

Phase 2- After phase 1 completion (~4 weeks)

| REHAB GOALS PRECAUTIONS | Controlled restoration of AROM Strengthen shoulder and scapular stabilizers in protected position (0- 45 degrees abduction) Begin proprioceptive and dynamic neuromuscular control retraining Correct postural dysfunctions Avoid repetitive overhead activities Post rehab soreness should alleviate within 12 hours of the activities |
|---------------------------------------|--|
| RANGE OF MOTION EXERCISES | AROM in all cardinal planes – assessing scapular rhythm Cervical spine and scapular AROM |
| SUGGESTED THERAPEUTIC EXERCISES | Rotator cuff strengthening in non-provocative positions (0-45 degrees abduction) Scapular strengthening and dynamic neuromuscular control Gentle shoulder mobilizations as needed Postural exercises Core strengthening |
| CARDIOVASCULAR EXERCISE | Walking, stationary bike, stairmaster. (Avoid running and jumping until athlete has full rotator cuff strength in a neutral position due to forces that can occur at landing) |
| PROGRESSION CRITERIA | The patient can progress to Phase III when they have achieved full AROM (equal to uninvolved side) and 5/5 strength for IR/ER at 45 degrees abduction |

Phase 3- After completion of phase 2 (~7-8 weeks)

| 2. Full multi-planar AROM | REHAB GOALS | 5/5 rotator cuff strength at 90 degrees abduction and supraspinatus Full multi-planar AROM Advance proprioceptive and dynamic neuromuscular control retraining |
|---|-------------|--|
| · | | 3. Advance proprioceptive and dynamic neuromuscular control |
| 3. Advance proprioceptive and dynamic neuromuscular control | | retraining |

| | Correct postural dysfunctions with work and sport specific tasks |
|---------------------------------------|---|
| PRECAUTIONS | Post-rehab soreness should alleviate within 12 hours of the activities |
| RANGE OF MOTION EXERCISES | Multi-plane AROM with gradual increase in velocity of movement – assessing scapular rhythm Cervical spine and scapular AROM |
| SUGGESTED THERAPEUTIC EXERCISES | Gentle shoulder mobilizations as needed Rotator cuff strengthening in at 90 degrees abduction, provocative positions and work/sport specific positions Postural exercises Core strengthening |
| CARDIOVASCULAR EXERCISE | Walking, stationary bike, stairmaster and running (Avoid swimming until athlete has 5/5 rotator cuff strength at 90 degrees abduction and negative impingement signs) |
| PROGRESSION CRITERIA | Patient may progress to Phase IV if they have achieved full multi-plane AROM (equal to uninvolved side) and 5/5 strength for IR/ER at 90 degrees abd and full supraspinatus strength |

Phase 4- After completion of phase 3 (~10-12 weeks)

| REHAB GOALS | 5/5 rotator cuff strength at 90 degrees abduction and supraspinatus Advance proprioceptive and dynamic neuromuscular control retraining Correct postural dysfunctions with work and sport specific tasks Develop strength and control for movements required for work or sport |
|---------------------------------------|---|
| PRECAUTIONS | Post-rehab soreness should alleviate within 12 hours of the activities |
| RANGE OF MOTION EXERCISES | Multi-plane AROM with gradual increase in velocity of movement – assessing scapular rhythm Cervical spine and scapular AROM |
| SUGGESTED THERAPEUTIC EXERCISES | Shoulder mobilizations as needed Rotator cuff strengthening in at 90 degrees abduction, provactive positions and work/sport specific positions – including eccentric strengthening, endurance and velocity specific exercise Scapular strengthening and dynamic neuromuscular control in overhead positions and work/sport specific positions Work and sport specific strengthening Core and lower body strengthening Throwing program, swimming program or overhead racquet program as needed |

| CARDIOVASCULAR | Design to use work or sport specific energy systems |
|-------------------------|--|
| EXERCISE | |
| PROGRESSION CRITERIA | The patient may return to sport after receiving clearance from the orthopedic surgeon and the physical therapist/athletic trainer. This will be based on meeting the goals of this phase |