

# SCAPULOTHORACIC DECOMPRESSION PROTOCOL

This protocol provides appropriate guidelines for the rehabilitation of patients following scapulothoracic decompression. The protocol draws evidence from the current literature and accounts for preferences of the surgeons at Summit Orthopedics. The program may be modified by the referring provider for an individual patient. If questions arise regarding the utilization of the protocol or the progress of the patient, contact Summit Orthopedics: **(651) 968-5200** 

# PT FREQUENCY & DURATION

- » Eight to 12 physical therapy visits over 4 months.
- » Begin physical therapy 2-3 weeks after surgery as instructed by surgeon.

### **REHAB PRINCIPLES**

- » Focus on active engagement of the patient through patient education and therapeutic exercise. Establish a home exercise program that can be progressed gradually throughout the postoperative period.
- » Respect tissue healing. The surgeons at Summit Orthopedics uniformly prefer a slow progression of post-op patients with minimal postoperative pain.
- » Postoperative pain may be experienced. However, physical therapy, including the home exercise program, should result in minimal to no symptom exacerbation. The patient should call the PT for recommendations if pain increases during or after exercise.
- » The therapeutic exercises listed in this protocol convey the appropriate load for the shoulder given the time elapsed since surgery in regard to tissue healing. It is acceptable for a patient to progress more slowly. However, it is not acceptable for a patient to progress more quickly unless directly indicated by the surgeon.
- » Recommended max of 6 exercises for home exercise program. Select a well-rounded program that targets each area of insufficiency identified during physical exam.

### **MODALITIES**

Cold Therapy/Ice: Use ice daily until pain-free or 8 weeks after surgery.

Other Modalities: DO NOT USE

## MANUAL THERAPY

- » No passive range of motion (physiologic/long arc). DO NOT USE
- » Joint mobilization to address shoulder hypomobility after 4 weeks ONLY if prescribed by surgeon.
- » OK to use grade I-IV thoracic mobilization after 4 weeks ONLY if prescribed by surgeon
- » No grade V thoracic mobilization.
- » Soft tissue techniques to upper trapezius/levator scapula/pect minor are permitted.

### THERAPEUTIC ACTIVITY & PATIENT EDUCATION

Patient education is very important in getting the patient to take an active role in therapy and recovery. Educate the patient at the appropriate level regarding:

- » Anatomy of the shoulder girdle.
- » Basics of surgical procedure in layman's terms.
- » Surgical precautions.
- » Shoulder girdle mechanics: typical and pathomechanical.
- » The inhibitory effect of pain on the rotator cuff.
- » Avoidance of pain-provoking activities.
- » Effect of posture on shoulder girdle mechanics.
- » Preferred positioning of the shoulder during sleep.

### THERAPEUTIC EXERCISE

Focus on thoracic mobility and scapular stability.

- » Free Weights: Use only as directed throughout protocol.
  - » For patients over 60 years old:

No external weights for rotator cuff strength/conditioning.

(Examples: Side lying external rotation, full can.)

» For patients aged 40-60:

Progress from 2 ounces to 4, then a max of 8 ounces for rotator cuff strength/conditioning.

» For patients under 40 years old:

Progress from 2 ounces to 4, then 8 ounces. A max of 16 ounces can be used for rotator cuff strength/conditioning.

» Exercise Band: DO NOT USE

The use of Yellow Theraband®, the least resistive color in the Theraband series, results in 2.9 pounds of resistance when elongated by 100%. In addition, length-tension principles of muscle function do not align with exercise band properties; the muscle is asked to provide maximum force at a shortened and inefficient length. Therefore, exercise band use is not permitted for use during rotator cuff conditioning.

» Pulleys: DO NOT USE

Page numbers below reference the Therapeutic Exercise Handout. The PDF for the Therapeutic Exercise Handout file containing instructions and pictures for each exercise can be printed from the Summit Orthopedics website: www.summitortho.com/provider/michael-q-freehill-m-d/

# WEEK 0-2 (CONTINUOUS USE OF SLING):

After surgery, patient receives post-op instructions that include:

- » Wear sling 2-3 days. Remove for dressing and completion of pendulum exercises.
- » Begin pendulum exercises the day of surgery. Ten reps in each direction four times per day.
- » Application of ice with shoulder ice wrap (Bird & Cronin).
- » Remove wound dressing 2 days after surgery (or as instructed). Leave Steri-Strips in place.
- » Begin light tabletop activities after removing the sling.
- » OK to drive once off narcotic pain medication.

# **WEEK 2-4:**

- » Initiate physical therapy with a focus on gentle midrange active range of motion.
- » Initiate early scapular stabilization.
- » HEP 5-7x/week.
- » Ice after PT/HEP.
- » Appropriate exercises:

PAGE	EXERCISE	DOSE
6	Prayer Stretch	5x10" with goal of 10x10"
12	Ceiling Punch (active assisted to active)	2x10 with goal of 2x20
13	Reverse Codman (active assisted to active)	2x10 with goal of 2x20
7	Supine Protraction	2x10 with goal of 2x20
10	Seated ER (to neutral)	2x10 with goal of 2x30
13	Table Circles	10 with goal of 20 clockwise and counterclockwise Focus on posture/scap set

# **WEEK 5-8:**

- » Early rotator cuff conditioning.
- » Gradually progress exercise for scapular stability.
- » Thoracic mobilization (grade I-IV) only if prescribed by surgeon.
- » HEP 5-7x/week.
- » Ice after PT/HEP.
- » Appropriate exercises (if exercises from week 2-4 result in a max of 3/10 pain):

PAGE	EXERCISE	DOSE
12	Ceiling Punch	2x20
13	Reverse Codman	20 each direction
7	Supine Protraction	2x20
8	Table Press	20x3"
8	Lower Trap Retraining	20x3"
8	Prone I	20x3"
15	Thoracic Extension	3 minutes
10	Side Lying ER	2x30
11	Bear Hug	20x3" — gentle
3	Golfer Stretch	3x30"
13	Wall Circles	20 each direction
15	Upper Trapezius Stretch	as needed
16	Levator Scapula Stretch	as needed

# **WEEK 9-12:**

- » Advance rotator cuff conditioning.
- » Progress scapular stability exercises.
- » Thoracic mobilization (grade I-IV) only if prescribed by surgeon.
- » HEP 3-4x/week.
- » Ice after PT/HEP as needed.
- » Appropriate exercises (if exercises from week 5-8 result in a max of 3/10 pain):

PAGE	EXERCISE	DOSE
7	Wall Protraction	2x20
9	Prone W	2x20
9	Prone Superman	2x20
13	Wall Circles with Ball	20 each direction
15	Thoracic Extension	3 minutes
10	Side Lying ER	2x50
11	Bear Hug	20x3" — moderate
3	Golfer Stretch	3x30"
3	Sleeper Stretch	3x30"
15	Upper Trapezius Stretch	as needed
16	Levator Scapula Stretch	as needed

# **WEEK 12+:**

- » Advanced rotator cuff conditioning.
- » Progress scapular stability exercises.
- » Addition of core strengthening with shoulder integration.
- » Thoracic mobilization (grade I-IV) only if prescribed by surgeon.
- » HEP 3-4x/week.
- » Ice after PT/HEP as needed.
- » Appropriate exercises (if exercises from week 9-12 result in a max of 3/10 pain):

PAGE	EXERCISE	DOSE
7	Wall Protraction	2x20
8	Push-up Plus	2x20
9	Prone W	2x20
9	Prone Superman	2x20
9	Prone T	2x20
10	Prone Y	2x20
	Core Exercises	
10	Side Lying ER	2x50
11	Belly Press	20x3"
3	Sleeper Stretch	3x30"
12	Full Can	2x30
12	Flexion	2x30
15	Thoracic Extension	3 minutes

» After discharge from formal PT, continue with HEP 2x/week until one-year anniversary of surgery.

#### **RETURN TO SPORT**

#### **WEIGHT TRAINING**

- » Return to modified program when rotator cuff strength is 5/5 in all planes and cleared by physician.
  - » Upper body weight training no more than 2x/week.
  - » First do rehab exercises as part of upper body warm-up.
  - » Lift appropriate weight for 2-3 sets of 15.
- » Acceptable Upper Body Lifts

» Biceps: Curls with free weights, elbows at sides, scap set throughout

» **Triceps:** Press down with V rope on cable column.

Bent over kick back with free weights.

No "skull crusher" variations.

» Row: Seated row with cable column.

Bent over row with free weights.

Scap set during pull phase, elbows never behind body.

» Lat Pull-downs: Lean slightly back and pull bar to chest.

- » Advise the patient that the following exercises should NEVER be completed after subacromial decompression unless specifically cleared by the physician:
  - » Dips
  - » Shrugs
  - » Incline Press
  - » Military Press
  - » Bench Press
  - » Push-ups
  - » Lateral Raise
  - » Pect Fly

## **THROWING**

If applicable, begin return to throw program at 4+ months when rotator cuff strength is 5/5 in all planes and cleared by physician.

# **COLLISION SPORTS**

Four+ months as determined by surgeon.

# **YOGA**

- » Patient may begin a modified yoga practice consisting of non-weight-bearing movement patterns when scapular mechanics are good and AROM is pain-free and without compensatory shoulder hiking.
- » Begin weight-bearing postures at 3+ months once cleared by the physician.
- » Instruct that during the sun salutation/chaturanga, the patient should bypass the low plank (downward dog » high plank on knees » hold high plank [while others in class pass through low plank] » upward dog).

## **OTHER SPORTS**

When cleared by physician.

APPOINTMENTS: (651) 968-5201

ONLINE SCHEDULING: SUMMITORTHO.COM/SCHEDULE