



Sports & Orthopaedic Specialists

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 Sports & Orthopaedic Specialists. The program may be modified by the referring provider for an individual patient. If questions arise regarding the application of the protocol or the progress of the patient, contact Sports & Orthopaedic Specialists:

Main line: (952) 946-9777

Physical therapy: (952) 914-8631

PT FREQUENCY & DURATION

- Eight to ten physical therapy visits over 4 months
- Begin physical therapy 2-3 weeks after surgery or 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 Sports & Orthopaedic Specialists uniformly prefer a slow progression of postop 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 regards 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 expressly 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: Instruct patient to 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 AND 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 the following age guidelines to establish a maximum weight for rotator cuff strength/conditioning ONLY when the protocol calls for the use of free weights.

For patients over 60 years old:

No external weights for rotator cuff strength/conditioning (Ex: Side lying external rotation, full can)

For patients aged 40-60:

Progress from two ounces to four, then a max of eight ounces for rotator cuff strength/conditioning.

For patients under 40 years old:

Progress from two ounces to four, then of eight 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

A PDF file containing instructions and pictures for each exercise referenced in this protocol can be printed from the Sports & Orthopaedic Specialists website. "Therapeutic Exercise Handout"

www.sportsandortho.com/minneapolis/rehabilitation-center

SCAPULOTHORACIC DECOMPRESSION PROTOCOL



WEEK 0-2:

Patient receives postop instructions after surgery 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 table top activities after removing the sling.
- Ok to drive once off narcotic pain medication.

WEEK 2-4:

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

<u>Page</u>	<u>Exercise</u>	<u>Dose</u>
9	Prayer stretch	5x10" with goal of 10x10"
20	Ceiling punch (active or active assisted)	2x10 with goal of 2x20
22	Reverse Codman (active or active assisted)	2x10 with goal of 2x20
12	Supine protraction	2x10 with goal of 2x20
17	Seated ER	2x10 with goal of 2x30
22	Table circles	20 circles CW and CCW – focus on posture/scap set

SCAPULOTHORACIC DECOMPRESSION PROTOCOL



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):

<u>Page</u>	<u>Exercise</u>	<u>Dose</u>	<u>Page</u>	<u>Exercise</u>	<u>Dose</u>
20	Ceiling punch	2x20	17	Side lying ER	2x30
22	Reverse codman	20 each direction	19	Bear hug	20x3" - gentle
12	Supine protraction	2x20	4	Golfer stretch	3x30"
13	Table press	20x3"	23	Wall circles	20 each direction
14	LTR	20x3"	27	Upper trap stretch	as needed
14	Prone I	20x3"	27	Levator scap stretch	as needed
26	Thoracic extension	3 minutes			

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):

<u>Page</u>	<u>Exercise</u>	<u>Dose</u>	<u>Page</u>	<u>Exercise</u>	<u>Dose</u>
12	Wall protraction	2x20	17	Side lying ER	2x50
15	Prone W	2x20	19	Bear hug	20x3" - moderate
15	Prone Superman	2x20	4	Golfer stretch	3x30"
23	Wall circles with ball	20 each direction	4	Sleeper Stretch	3x30"
26	Thoracic extension	3 minutes	27	Upper trap stretch	as needed
			27	Levator scap stretch	as needed

SCAPULOTHORACIC DECOMPRESSION PROTOCOL



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):

<u>Page</u>	<u>Exercise</u>	<u>Dose</u>	<u>Page</u>	<u>Exercise</u>	<u>Dose</u>
12	Wall protraction	2x20	17	Side lying ER	2x50
13	Push up +	2x20	19	Belly press	20x3"
15	Prone W	2x20	4	Sleeper Stretch	3x30"
15	Prone Superman	2x20	21	Full can	2x30
16	Prone T	2x20	21	Flexion	2x30
16	Prone Y	2x20	27	Thoracic extension	3 minutes
24-25	Core exercises				

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

SCAPULOTHORACIC DECOMPRESSION PROTOCOL



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 warmup
- 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 scapulothoracic decompression unless specifically cleared by the physician:

Dips	Incline press	Bench press	Lateral raise
Shrugs	Military press	Pushups	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