



Rotation Medical Patch Rehabilitation Protocol

Derived from Rotation Medical
Dr. Kolowich

Phase 1: Immediate post-op phase (first 5-7 days after surgery, prior to starting PT)

Goals:

1. Protect the surgical site
2. Ensure wound healing
3. Diminish pain and inflammation
4. Prevent stiffness and regain motion

Activities:

1. Sling: Use your sling for 24 to 48 hours. Remove the sling 4 or 5 times a day to do pendulum exercises. You will need to sleep with your sling and pillow in place. It is often more comfortable to sleep in a recliner or on several pillows.
2. Use the affected arm: You may use your hand on the affected arm in front of your body. It is all right for you to flex your arm at the elbow. Continue to move your elbow, wrist and hand to help circulation and motion. Also:
 - a. No lifting of objects over 5 lbs.
 - b. No excessive shoulder extension
 - c. No excessive stretching or sudden movements
 - d. No supporting of body weight by hands
3. Continue to ice on a regular basis. At least 20 min at a time, 4-5 times per day.
4. Your first therapy appointment should be within 5-7 days after your surgery.

Exercises:

Program: 7 days per week, 4-5 times per day

Pendulum exercises	1-2 sets	20-30 reps
Supine external rotation	1-2 sets	10-15 reps
Supine passive arm elevation	1-2 sets	5-10 reps
Scapular retraction (shoulder blade pinches)	1-2 sets	5-10 reps
Shoulder shrug	1-2 sets	10-15 reps



Pendulum exercise

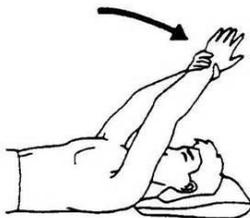
Remove your sling, bend over at the waist and let the arm hang down. Using your body to initiate movement, swing the arm gently forward and backward and in a circular motion.



Matsen Fig. 2-34

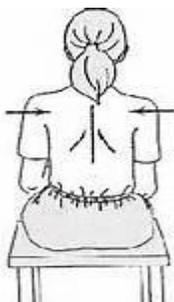
Supine External Rotation

Lie on your back. Keep the elbow of the operated arm against your side with the elbow at 90 degrees. Using a cane or a long stick in the opposite hand, push against the hand of the operated arm so that the operated arm rotates outward. Hold for 10 seconds, relax and repeat. The amount of allowed external rotation will be specified after surgery.



Supine passive forward elevation

Lie on your back. Hold the affected arm with the opposite hand at wrist or elbow. Assisting with the opposite arm, lift the operated arm upward, as if to bring the arm overhead. Slowly lower the arm back to the bed



Scapular Retraction (shoulder blade pinches)

While standing or sitting, pinch your shoulder blades backward and together.



Shoulder Shrug

While standing or sitting, lift shoulder blades up toward ears.

Phase 2: Intermediate phase (1-6 weeks post-op)

At this point you should begin your formal physical therapy, the instructions that follow are to aid your therapist in maximizing the results of your surgery while still protecting the repair. Bring these instructions to your therapy appointments.

Your therapist will instruct you on how to perform the exercises below and give you a home exercise program. It is important that you stay within the limits demonstrated and that you perform your exercises daily. You should strive to do your home exercise program at least 3-4 times per day, every day. The success of your repair depends on your rehab.

****PT should not hurt. Do not force painful motions.****

Goals:

1. Restore non-painful range of motion (ROM)
2. Retard muscular atrophy
3. Decrease pain/inflammation
4. Improve postural awareness
5. Minimize stress to healing structures
6. Independent with activities of daily living (ADLs)
7. Prevent muscular inhibition
8. Wean from sling

Activities:

1. Sling: You should now have weaned out of using your sling. It is a good idea, however, to continue to use your sling when you are away from the house to “send a signal” that others should not hit your shoulder.
2. Continue to ice on a regular basis. At least 20 min at a time 4-5 times per day.
3. Unless instructed otherwise it should be okay to drive at this point.
4. You can actively use your arm for daily living: bathing, dressing, driving, typing on a computer, eating and drinking.

Range of Motion:

- PROM (non-forceful flexion and abduction)
- Active assisted range of motion (AAROM)
- AROM
- Pendulums
- Pulleys
- Cane exercises
- Self stretches

Strengthening:

- Isometrics: scapular musculature, deltoid and rotator cuff as appropriate
- Isotonic: theraband internal and external rotation in 0 degrees abduction

Once patient has pain free full ROM and no tenderness, may progress to the following:

Strengthening:

- Initiate isotonic program with dumbbells
- Strengthening shoulder musculature – isometric, isotonic, PNF
- Strengthening scapulothoracic musculature - isometric, isotonic, PNF
- Initiate upper extremity endurance exercises (UBE)

Manual treatment:

- Joint mobilization to improve/restore arthrokinematics if indicated
- Joint mobilization for pain modulation

Phase 3: Active strengthening phase (6 weeks and beyond)

Goals:

- Improve strength, power and endurance
- Improve neuromuscular control
- Prepare athlete to begin to throw, and perform similar overhead activities or other sport specific activities.

Criteria for progression to this phase:

- Full painless ROM
- No pain or tenderness on examination

Exercises:

- Continue dumbbell strengthening (rotator cuff and deltoid)
- Progress theraband exercises to 90/90 position for internal rotation and external rotation (slow/fast sets)
- Theraband exercises for scapulothoracic musculature and biceps
- Plyometrics for rotator cuff
- PNF diagonal patterns
- Isokinetics
- Continue endurance exercises (UBE)
- Diagonal patterns

Return to sports:

- 12 weeks and beyond once adequate strength achieved for sports specific criteria