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**Physical Therapy Protocol**

**Rotator Cuff Repair: Large and Massive Tears**

## Patient Name:­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_

## Diagnosis:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Surgery: ­­­­­­­­­­­­­­­­­­­­­­­\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Surgery Date: \_\_\_\_\_\_\_\_\_\_\_\_

**Phase I - Protective Phase (Weeks 0 - 6)**

**If Subscapularis repair: Shoulder external rotation in scapular plane limited to 30° x 6 weeks**

**No shoulder external rotation at 90° abduction x6 weeks**

**No subscapularis/Internal Rotation strengthening x 12 weeks**

 Goals:

* Protect integrity of repair.
* No passive or active ROM for 6 weeks.
* Decrease pain and inflammation.
* Prevent muscular inhibition.

 Precautions:

* Wear brace/sling at all times except when performing prescribed exercises + hygiene.
* No lifting of objects at all.
* No excessive shoulder extension or behind back motions.
* No sudden movements or stretching.
* No supporting of body weight or pushing up from sitting using operative arn.

 **Weeks 0 - 6:**

* Sling/swathe for 6 weeks preferably with the abduction pillow.
* Perform elbow/hand/wrist ROM exercises.
* NO PASSIVE ROM (PROM) OF SHOULDER X 6 WEEKS except pendulums.
* NO STRENGTHENING at all.
* Pendulum exercises in pain-free range of motion starting at 2 weeks
* Pain control modalities (ice 15 - 20 minutes several times a day)

**Phase II - Intermediate Phase (Weeks 7 - 12)**

 Goals:

* Gradually establish full Active and Passive ROM by 12 weeks.

 **Weeks 7 - 9:**

* Discontinue brace and sling.
* Start PROM and Progress gently to full PROM with gentle stretching as needed.
* Upper extremity cycle.
* Active-assist ROM (AAROM):
	+ - Flexion to tolerance
		- ER/IR to tolerance in scapular plane
		- ER/IR to tolerance at 90° abduction
* Start Active ROM (AROM) at week 5 postop:
	+ - Scaption (weight of arm only).
* Encourage home exercises.

 **Weeks 10 -12:**

* Maintain PROM/AAROM with gentle stretching if needed
* Progress AROM to full with weight of arm only.
	+ - Focus on achievement of proper form.
* Begin light functional activities (no overhead activities).
* Encourage home exercises.

**Phase III - Advanced Strengthening Phase (13 - 20 Weeks)**

 Goals:

* Maintain full, non-painful ROM.
* Improve strength of general shoulder/periscapular musculature.
* Improve neuromuscular control.
* Gradual return to all functional activities.

 **Weeks 13-16:**

* Maintain full PROM/AROM
* Perform self-capsular stretches if motion is tight.
* Strengthening:
	+ - Start with weight of arm and progress gradually with focus on achievement of proper form.
		- Rhythmic stabilization drills.
		- Tubing ER at 0° abduction working on endurance.
		- Tubing scapular strengthening to neutral working on endurance.
		- Isotonics (gradually progress resistance):
			* Flexion to 90° (no resistance until AROM is performed without hiking).
			* ER/IR in side lying.
			* Prone rows.
			* Prone horizontal abduction.
			* Biceps/triceps.

**Weeks 16 - 20:**

* Advanced Strengthening program (at 16 weeks or earlier if tolerated): Continue isotonic/tubing and stabilization strengthening.
	+ - Closed chain stabilization drills.
		- High-speed isokinetics for ER/IR in neutral ( 16 weeks).
		- Begin general shoulder strengthening with precautions (Gradual as tolerated):
			* Latissimus pulls with narrow grip and arms in front of body.
			* Chest press with light dumbbells keeping elbows anterior to shoulder.
			* Machine rows.
			* Military press with light dumbbells and arms in front only.

**Phase IV -Return to Activity Phase (Weeks 21 - 26 and beyond)**

 Goals:

* Gradual return to recreational and occupational activities.
* Isokinetic strength test for ER/IR in neutral at I 80°/ sec and 300°/sec.

**Weeks 21 - 26:**

* Continue all strengthening exercises.
* Continue all ROM/flexibility exercises
* Encourage to continue HEP.
* Plyometric program (2 handed 🡪 1 handed).
* Begin interval sport program if approprIate.