Shoulder Posterior Repair Rehabilitation Protocol

Phase 1 (0-6 weeks post-op)

Rehabilitation Goals

Protect the surgical repair & avoid a "stiff" shoulder

PRECAUTIONS

<u>NO</u> active use of arm - must ALWAYS wear sling, even while sleeping*

<u>NO</u> cross-body or behind back reaching* 1-3

Sling

Sling with external rotation brace x 6 weeks per ortho/PT

Wound

- Post-op dressing remains intact until post-op day #3 (~72 hours after surgery)
- May begin showering after post-op day #3 (no need to cover incision site)
- <u>Do NOT</u> submerge shoulder in tub or pool for 4 weeks
- Suture/staple removal @ 10-14 days per Ortho/PT
- Begin scar massage after incision site sloughs/scar is formed

Rehabilitation

Note: Exercise prescription is dependent upon the tissue healing process and individual functional readiness in all stages. If any concerns or complications arise regarding the progress for any patient, physical therapy will contact the orthopedic surgeon.



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Rehabilitation

- **Modified Pendulum:** (May be done in the sling.) While supporting the affected arm with the unaffected hand, move the shoulder forward, backward, side to side and in clockwise and counterclockwise directions. Progress to full pendulum after 3–5 days.
- Supine Assisted Shoulder Flexion: Lie on back with arm down at side and thumb pointed towards the
 ceiling. Use unaffected hand to grasp the wrist of the affected arm and slowly raise it until a point of
 mild discomfort (within ranges of motion described above).
- **Elbow, Wrist, & Hand:** Perform elbow and wrist flexion, extension, pronation, and supination while holding the shoulder in a neutral position at side. For the hand, use a foam ball, newspaper, or theraputty to squeeze repetitively.
- **Gentle ("Two Finger") Isometrics:** Use the unaffected hand to provide very light, pain free resistance during shoulder flexion, adduction, extension, and abduction. Add gentle, pain free IR and ER at 3-4 weeks
- Aerobic Conditioning on Recumbent Bike: *Sling must be worn*
- **Scapular Retraction & Protraction**: Gently "pinch" shoulder blades together. Hold for 5 seconds and relax. Then spread shoulder blades apart. Hold for 5 seconds and relax
- Shoulder AAROM Exercises: Wand & pulley exercises
- Lower Extremity (Machine) Weight Lifting: May begin at 5-6 weeks

Follow-Up

- Physical Therapy: weekly
- Ortho: ~6 wks post-op
- Supervised rehab: 1-2 x per wk

Documentation

- Precautions, pain level, medications and modalities
- Observation: (incision sites) Signs/symptoms of infection? Site healing well?
- Neurovascular status: Distal pulses, motor and sensation intact? Shoulder passive ROM (forward flexion, ER with shoulder at side)



Shoulder Posterior Repair Rehabilitation Protocol

Phase 2 (7-12 weeks post-op)

Rehabilitation Goals

- ROM: Full shoulder flexion and external rotation
- ~90% full internal rotation
- Pain free ADLs

PRECAUTIONS

 ${\underline{\bf NO}}$ pushups, weight training, or other sports participation*2,4 ${\underline{\bf NO}}$ repetitive overhead use of shoulder

Sling

Wean from wearing sling/immobilizer per ortho/PT guidance

Rehabilitation

Continue phase I exercises as needed

- Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no
 increase in shoulder pain or stiffness since the previous exercise session)
- *Note: all strengthening should be done, starting with low weights, high repetitions, and in a painless ROM*
- Upper body cycle: begin with three 1-min sets (forwards and backwards) progress gradually
- Shoulder AROM and AAROM exercises: Wand, pulley, towel stretch, sleeper's stretch, etc.
- Progressive rotator cuff strengthening (see appendix)
- Progressive neuromuscular/functional training exercises (see appendix)
- Progressive shoulder stabilization exercises (see appendix)
- Beginning level pool program no overhead strokes
- Aerobic Conditioning: Bike, elliptical, stairmaster as desired
- May begin jogging progressions at approximately 9 weeks

Follow-Up

- Physical Therapy: bimonthly
- Ortho: ~3 months post-op
- Supervised rehabilitation: 2-3 x per week as needed

Documentation

- Pain level, medications, modalities
- Shoulder ROM & strength



Shoulder Posterior Repair Rehabilitation Protocol Phase 3 (4-6 months post-op)

Rehabilitation Goals

- Pushups at own pace without pain
- > 90% symmetry on internal/external rotation strength and assessments listed below

PRECAUTIONS

NO participation in contact/collision sports or military schools until ~9 months post-op

Rehabilitation

Continue phase I exercises as needed

- · Continue phase II exercises as needed
- Progress to the following exercises and increase intensity gradually when patient is ready (i.e., no increase in shoulder pain or stiffness since the previous exercise session)
- *Note: all strengthening should be done, starting with low weights, high repetitions, and in a painless ROM*
- Warm-up: 5-10 minutes on upper body cycle
- General upper quarter stretching: 5-10 minutes (shoulder, thoracolumbar spine)
- May begin general light intensity machine weight training with shoulder in "safe" position
- (avoid heavy overhead lifting, avoid shoulders in the 90° elevation, 90° ER position)
- Progressive rotator cuff strengthening (see appendix)
- Progressive neuromuscular/functional training exercises (see appendix)
- Progressive shoulder stabilization exercises (see appendix)
- Front plank progressions wall to floor2,3
- Progressive sports training: Begin at 25-50% intensity, progress gradually (see appendix)
- Controlled falls (eccentric triceps control) progressive angles / surfaces3

Follow-Up

- Physical Therapy: monthly
- Ortho: ~6months post-op
- Supervised rehabilitation: 1-2 x per week as needed

Documentation

- Pain level, medications, modalities
- Shoulder ROM & strength



Shoulder Posterior Repair Rehabilitation Protocol Phase 3 (4-6 months post-op)

Miscellaneous

- After 6 months post-op: Exercises in phase III are continued, gradually increasing intensity & duration as tolerated.
- The recommendation is to wait until 6-9 months post-op to return to contact/collision sports
- This time period may be adjusted slightly by the surgeon and therapist according to patient progress.

Testing

- Functional assessment at 6 months and as needed until symmetry indices are met
- Unilateral seated shot put test5
- Performed with 6 pound med ball, seated against wall, knees flexed to 90
- Goal: Dominant arm limb symmetry ≥ 95%
- Non-dominant arm limb symmetry ≥ 85%
- Upper quarter Y-balance test6
- Pushup position, feet no greater than 12 inches apart
- Goal: ≥ 90% limb symmetry, calculated by composite reach score



Appendix

The following is a supplement to the rehabilitation guidelines on various types of shoulder exercises. It is not an all-inclusive list, but provides ideas for gradually progressing a patient through rehabilitation

In general, beginning level shoulder exercises are performed with light resistance in a ROM below 90° of shoulder elevation. Intermediate level exercises are done with moderate resistance in a ROM below 120°.

Advanced level exercises are done with moderate resistance in a full ROM, but avoiding the 90° abducted, 90° externally rotated position until ~5-6 months post-op.

All training should be pain free.			
Exercise Type	Beginning Level ~ 7-10 weeks Post-Op	Intermediate Level ~ 9-18 weeks Post-Op	Advanced Level ~ 16-26 weeks Post-Op
Body Blade	Flexion/Extension IR/ER Superior/Inferior (arm at side)	FF range to 90° Scaption to 90° IR/ER through ROM Horiz adb/add at 90°	FF range to 150° Scaption to 150° IR/ER through ROM Diagonal motions
Ball Toss	Chest pass – 2 handed IR toss – (arm at side)	Overhead toss – (2 handed) Behind back toss	Overhead diagonal toss – (2 handed) Regular throwing toss
Prone Stabilization	Weight shifting in sitting, prone on all fours	All fours stabilization on stable surface	All fours stabilization on theraball
Supine Stabilization	Supine Shoulder Stabilization at 90 degrees	Supine Shoulder Stabilization at 60-120 degrees	Supine Shoulder Stabilization (Available ROM)
Cuff Strengthening	ER/IR (arm at side) FF/Scaption to 60-90 degrees (Thumb up)	ER/IR (30-45 degrees shoulder scaption) FF/Scaption to 90-120 degrees (Thumb up)	ER/IR (45-90 degrees shoulder scaption) gradually moving into abd PNF patterns
Scapular Strengthening	Ceiling "punches" & Rows	"Pushouts" (in standing) & Rows (inferior/superior)	Push-up Plus
Push-Ups	None	Wall Push-Ups- Progressing to incline push-ups (week 12)	Knee Push-Ups - Progressing to modified regular push-ups
Misc. Activities	Basketball: dribbling, chest and bounce pass Golf: putting Volleyball: bumping Pool: jogging, treading. Wall ball drawing	Basketball: shooting within the key only Golf: chipping, short irons Volleyball: setting Pool: No overhead strokes Tossing Frisbee Catching drills: below 90° Running progressions	Basketball: noncontact drills only Golf: gradual return Vball: gradual return ~6 mo Pool: gradual return Forehand, backhand racquet sports (no overhead)