



The rehabilitation guidelines are presented in a criterion based progression. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, and rehab compliance and injury severity. Specific time frames, restrictions and precautions may also be given to protect healing tissues and the surgical repair/reconstruction.

**REHABILITATION GUIDELINES
POSTERIOR SHOULDER RECONSTRUCTION +/- LABRAL REPAIR**

PHASE I: 0-4 WEEKS

DOS:

APPOINTMENTS	Meet with the Physician: Begin Physical Therapy at 3-5 days post-op.
REHAB GOALS	<ol style="list-style-type: none"> 1. Protection of the post-surgical shoulder. 2. Activation of the stabilizing muscles of the gleno-humeral and scapulo-thoracic joints. 3. Maintain ROM at the elbow and wrist. 4. PROM: Flex to 120° and abduction to 90°
PRECAUTIONS	<ol style="list-style-type: none"> 1. <u>Sling with wedge</u> immobilization required for soft tissue healing for 4 weeks. Discontinue after 4 weeks. 2. Hypersensitivity in axillary nerve distribution is a common occurrence. 3. No internal rotation past neutral for 6 weeks and no internal rotation with abduction for 8 weeks to protect repaired tissues 4. No horizontal adduction for 6 weeks
SUGGESTED THERAPEUTIC EXERCISES	<ul style="list-style-type: none"> • PROM flex and scaption to 120°, abduction to 90°, ER at side as tolerated • Begin week 2-3: sub-maximal shoulder isometrics for IR/ER, flex/ext, & abd/add. • Hand gripping. • Elbow, forearm, and wrist AROM. • Cervical spine and scapular AROM. • Desensitization techniques for axillary nerve distribution. • Postural exercises.
CARDIOVASCULAR FITNESS	Walking, stationary bike—sling on. (Avoid running and jumping due to the distractive forces that can occur at landing)(NO TREADMILL)

PHASE 2: 4-8 WEEKS

DATE:

APPOINTMENTS	Physician Appointment: Physical Therapy 1-2 x per week.
PHASE II GOALS	<ol style="list-style-type: none"> 1. Full PROM and AROM in all cardinal planes, except internal rotation. 2. Progress IR range of motion gradually to prevent over stressing the repaired posterior tissues of the shoulder at 6 weeks. 3. Strengthen shoulder and scapular stabilizers in protected



	<p>positions (0°-45° abduction.)</p> <p>4. Begin proprioceptive and dynamic neuromuscular control retraining. Avoid closed chain exercises due to stress to posterior repair.</p>
PRECAUTIONS	<ol style="list-style-type: none"> 1. Sling immobilization required for soft tissue healing for 4 weeks. Remove sling after 4 weeks. 2. Hypersensitivity in axillary nerve distribution is a common occurrence. 3. No internal rotation past neutral for 6 weeks and no internal rotation with abduction for 8 weeks to protect repaired tissues. 4. Avoid passive and forceful movements into internal rotation, extension and horizontal adduction.
SUGGESTED THERAPEUTIC EXERCISE	<ul style="list-style-type: none"> • PROM as tolerated to full • AA/AROM in all cardinal planes-assessing scapular rhythm, respecting IR ROM guidelines. • Gentle shoulder mobilizations as needed. • Rotator cuff strengthening in non-provocative positions (0°-45° abduction) • Scapular strengthening and dynamic neuromuscular control. • Cervical spine and scapular ROM. • Postural exercises. • Core strengthening.
CARDIOVASCULAR FITNESS	<p>Walking, stationary bike, stairmaster. No swimming, elliptical, or treadmill. (Avoid running and jumping until athlete is at least 12 weeks post-op and has full rotator cuff strength in a neutral position due to the distractive forces that can occur at landing.)</p>
PROGRESSION CRITERIA	<ol style="list-style-type: none"> 1. Full AROM. 2. 5/5 IR/ER strength at 45° abduction.

PHASE 3: BEGIN AT 8 WEEKS POST-OP

DATE:

APPOINTMENTS	<p>Physician Appointment: Physical Therapy 1x every 2-3 weeks.</p>
PHASE III GOALS	<ol style="list-style-type: none"> 1. Full AROM in all cardinal planes with normal scapulo-humeral movement. 2. 5/5 rotator cuff strength at 90° abduction in the scapular plane. 3. 5/5 peri-scapular strength.
PRECAUTIONS	<ol style="list-style-type: none"> 1. Avoid posterior pain with activity/rehab. Post-activity soreness should be mild and subside within 24 hours. 2. All exercises and activities to remain non-provocative and low to medium velocity. 3. Avoid activities where there is a higher risk for falling or outside forces to be applied to the arm. 4. No swimming, throwing or sports.



SUGGESTED THERAPEUTIC EXERCISE	<p><u>Motion</u> No restriction for internal rotation, normalize to other side gradually and with appropriate end feel.</p> <p><u>Strength and Stabilization</u> Flexion in prone, or abd in prone, full can ex, D1 and D2 diagonals in standing below 90° abduction. TB/cable column/dumbbell (light resistance/high rep) IR/ER below 90° abduction and rowing.</p>
CARDIOVASCULAR FITNESS	Walking, biking, stairmaster (if they have met PII criteria). <u>NO SWIMMING, elliptical, or throwing</u>
PROGRESSION CRITERIA	Patient may progress to Phase IV if they have met the above stated goals and are at least 12 weeks post-op.

PHASE 4: BEGIN AT 12-16 WEEKS POST-OP

DATE:

APPOINTMENTS	PT 1x every 3 weeks
PHASE IV GOALS	<ol style="list-style-type: none"> Pt. to demonstrate stability with higher velocity movements and change of direction of movements 5/5 rotator cuff strength with multiple repetition testing at 90° Full multiplane AROM
PRECAUTIONS	<ol style="list-style-type: none"> Avoid posterior pain with activity/rehab. Post-activity soreness should subside within 24 hours Progress gradually into provocative exercises by beginning with low velocity and known movement patterns Progress gradually into closed-chain exercises focusing on ability to control posterior forces
SUGGESTED THERAPEUTIC EXERCISES	<p>Strength and stabilization</p> <p>Dumbbell and medicine ball exercises that incorporate trunk rotation and control with rotator cuff strengthening at 90° abduction. Begin working towards more functional activities by emphasizing core and hip strength and control with shoulder exercises</p> <p>TB/cable column/dumbbell IR/ER in 90° abduction and rowing</p> <p>Balance board in push-up position (with RS), prone swiss ball walkouts, rapid alternating movements in supine D1 diagonals. CKC stabilization with narrow BOS</p>
CARDIOVASCULAR FITNESS	Walking, biking, stairmaster, and jogging (if Phase II goals met). NO SWIMMING or THROWING. Elliptical okay if no use of arms



PROGRESSION CRITERIA	Patient may progress to Phase V if they have met the above stated goals and have no apprehension or impingement signs
----------------------	---

PHASE 5: BEGIN AT ~16 WEEKS POST-OP	DATE:
--	--------------

APPOINTMENTS	PT 1x every 3 weeks
PHASE V GOALS	<ol style="list-style-type: none"> 1. Pt to demonstrate stability with higher velocity movements and change of direction movements that replicate sport specific patterns (including swimming and throwing) 2. No apprehension or instability with high velocity overhead movements 3. Improve core and hip strength and mobility to eliminate any compensatory stresses to the shoulder 4. Work capacity cardiovascular endurance for specific sport or work demands
PRECAUTIONS	<ol style="list-style-type: none"> 1. Progress gradually into sport specific movement patterns 2. Avoid posterior pain with activity. Post-activity soreness should be mild and subside within 24 hours
SUGGESTED THERAPEUTIC EXERCISE	<p>Strength and Stabilization</p> <p>Dumbbell and medicine ball exercises that incorporate trunk rotation and control with rotator cuff strengthening at 90° abduction and higher velocities. Begin working towards more sport specific activities.</p> <p>Higher velocity strengthening and control, such as the inertial plyometrics, rapid thera-band drills. Plyometrics should start with 2 hands below shoulder ht and progress to overhead, then back below shoulder with one hand, progressing again to overhead.</p> <p>Initiate throwing program, overhead racquet program or return to swimming program depending on the athlete's sport</p>
CARDIOVASCULAR FITNESS	Design to use sport specific energy systems.
PROGRESSION CRITERIA	Patient may return to sport after receiving clearance from the Orthopedic Surgeon and the Physical Therapist/Athletic Trainer.