



HUDSON PRO ORTHOPAEDICS & SPORTS MEDICINE

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REHABILITATION GUIDELINES FOR ANTERIOR SHOULDER RECONSTRUCTION WITH BANKART REPAIR

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, rehab compliance and injury severity. Specific time frames, restrictions and precautions may also be given to protect healing tissues and the surgical repair/reconstruction.

PHASE I (Surgery to 3 weeks post op)

APPOINTMENTS	Meet with the physician at 1 week post op Begin physical therapy within 7 days after surgery
REHAB GOALS	1. Protection of the post-surgical shoulder 2. Activation of the stabilizing muscles of the gleno-humeral and scapulo-thoracic joints 3. Full PROM/AAROM for shoulder flex/ext, abd/add. ER to neutral and IR
PRECAUTIONS	1. Sling immobilization required for soft tissue healing for 3-4 weeks. Remove sling during the 4 th week in safe environments 2. Hypersensitivity in axillary nerve distribution is a common occurrence 3. No external rotation with abduction for 6 weeks to protect repaired tissues
SUGGESTED THERAPEUTIC EXERCISE	<ul style="list-style-type: none">• Begin week 3, sub-maximal shoulder isometrics for IR/ER, flex/ext & abd/add• PROM/AAROM for shoulder flex/ext, abd/add, ER to neutral and IR, progressing to AROM at week 5• 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. No treadmill (Avoid running and jumping due to the distractive forces that can occur at landing)
PROGRESSION CRITERIA	1. Full AROM in all cardinal planes 2. 5/5 IR/ER strength at 0 degrees abduction 3. Negative apprehension and impingement signs

PHASE II (Begin at 6 weeks post op)

APPOINTMENTS	Meet with the physician at 6 weeks post op Physical therapy 1x/ 1-2 weeks
PHASE II GOALS	<ol style="list-style-type: none"> 1. Full AROM in all cardinal planes 2. Progress ER range of motion gradually to prevent oversteering the repaired anterior tissues of the shoulder 3. Strengthen shoulder and scapular stabilizers in protected position (0-45 degrees abduction) 4. Begin proprioceptive and dynamic neuromuscular control retraining
PRECAUTIONS	<ol style="list-style-type: none"> 1. Avoid passive and forceful movements into external rotation, extension and horizontal abduction
SUGGESTED THERAPEUTIC EXERCISE	<ul style="list-style-type: none"> • AA/AROM in all cardinal planes – assessing scapular rhythm • Gentle shoulder mobilizations as needed • Rotator cuff strengthening in non-provocative positions (0-45 degrees abduction) • Scapular strengthening and dynamic neuromuscular control • Cervical spine and scapular AROM • Postural exercises • Core strengthening
CARDIOVASCULAR FITNESS	Walking, stationary bike, stairmaster. No swimming or treadmill. (Avoid running and jumping until athlete has full rotator cuff strength in a neutral position due to the distractive forces that can occur at landing)
PROGRESSION CRITERIA	<ol style="list-style-type: none"> 1. Full AROM 2. Negative apprehension and impingement signs 3. 5/5 IR/ER strength at 45 degrees abduction

PHASE III (Begin when criteria from Phase II has been met ~ 10-11 weeks)

APPOINTMENTS	Meet with the physician at 12 weeks post op Physical therapy 1x/2-3 weeks
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 degrees abduction in the scapular plane 3. 5/5 peri-scapular strength
PRECAUTIONS	<ol style="list-style-type: none"> 1. All exercises and activities to remain non-provocative and low to medium velocity 2. Avoid activities where there is a higher risk for falling or outside forces to be applied to the arm 3. No swimming, throwing or overhead sports
SUGGESTED THERAPEUTIC EXERCISE	<p><u>Motion</u> Posterior glides if posterior capsule tightness is present. More aggressive ROM if limitations are still present</p> <p><u>Strength and Stabilization</u> Flexion in prone, hor abd in prone, full can ex, D1 and D2 diagonals in standing</p>

	<p>TB/cable column/ dumbbell (light resistance/high rep) IR/ER in 90 degrees abduction and rowing</p> <p>Balance board in push-up position (with RS), prone swiss ball walk-outs, rapid alternating movements in supine D2 diagonal</p> <p>CKC stabilization with narrow base of support</p>
CARDIOVASCULAR FITNESS	Walking, biking, stairmaster and running (if they have met Phase II criteria) NO SWIMMING
PROGRESSION CRITERIA	Patient may progress to Phase IV if they have met the above stated goals and have no apprehension or impingement signs

PHASE IV (Begin when goals and criteria from Phase III are met, ~15 wks)

APPOINTMENTS	Meet with the physician at 18 weeks post op Physical therapy 1x/3 weeks
PHASE IV GOALS	<ol style="list-style-type: none"> 1. Patient to demonstrate stability with higher velocity movements and change of direction movements 2. 5/5 rotator cuff strength with multiple repetition testing at 90 degrees abduction in the scapular plane 3. Full multi-plane AROM
PRECAUTIONS	1. Progress gradually into provocative exercises by beginning with low velocity, known movement patterns
SUGGESTED THERAPEUTIC EXERCISE	<p><u>Motion</u> Posterior glides if posterior capsule tightness is present</p> <p><u>Strength and Stabilization</u> Dumbbell and medicine ball exercises that incorporate trunk rotation and control with rotator cuff strengthening at 90 degrees 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 degrees abduction and rowing</p> <p>Higher velocity strengthening and control, such as the inertial, plyometrics, rapid theraband drills. Plyometrics should start with 2 hand below shoulder ht and progress to overhead, then back to below shoulder with one hand, progressing again to overhead</p>
CARDIOVASCULAR FITNESS	Walking, biking, stairmaster and running (if they have met Phase II criteria) NO SWIMMING
PROGRESSION CRITERIA	Patient may progress to Phase V if they have met the above stated goals and have no apprehension or internal impingement signs

PHASE V (Begin when goals and criteria from Phase IV are met, ~20 wks)

APPOINTMENTS	Meet with the physician at 24 weeks post-op
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	Physical therapy 1x/ 3 weeks
PHASE V GOALS	<ol style="list-style-type: none"> 1. Patient to demonstrate stability with higher velocity movements and change of direction movements that replicate sport specific patterns (including swimming, throwing, etc) 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	1. Progress gradually into sport specific movement patterns
SUGGESTED THERAPEUTIC EXERCISE	<p><u>Motion</u> Posterior glides if posterior capsule tightness is present</p> <p><u>Strength and Stabilization</u> Dumbbell and medicine ball exercises that incorporate trunk rotation and control with rotator cuff strengthening at 90 degrees abduction and higher velocities. Begin working towards more sport specific activities</p> <p>Initiate throwing program, overhead racquet program or return to swimming program depending on the athlete's sport</p> <p>High velocity strengthening and dynamic control, such as the inertial, plyometrics, rapid theraband drills</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