REHABILITATION GUIDELINES
ANTERIOR SHOULDER RECONSTRUCTION WITH BANKART REPAIR

DOS:

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.

LIFE-LONG PRECAUTION: No weighted hyperextension or hyperabduction (ie: bench press beyond neutral or deep push ups)

PHASE 1: BEGIN 3-5 DAYS POST-OP THROUGH 3 WEEKS DATE:

APPOINTMENTS	Meet with the Physician: Begin Physical Therapy 3-5 days post-op
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 6 weeks. Remove sling during the 6th week in safe environments. 2. FOR 0-2 WEEKS, WRIST AND ELBOW ROM ONLY. 3. Hypersensitivity in axillary nerve distribution is a common occurrence. 4. No external rotation with abduction for 6 weeks to Protect repaired tissues.
SUGGESTED THERAPEUTIC	• Begin week 3, gentle shoulder

EXERCISES	isometrics for IR/ER, flex/ext, & abd/add.
	• PROM/AAROM
	  ○ At 2 weeks: PROM/AAROM flex to 90 deg, ER to neutral
	  ○ At 4 weeks: PROM/AAROM flex to 120 deg, abd to 90 deg, ER to neutral
	  ○ 6 weeks: Progress to full PROM and AAROM
	• Hand gripping.
	• Elbow, forearm, and wrist 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)
PROGRESSION CRITERIA	1. Full AROM in all cardinal planes, Except ER, only to neutral 2. 5/5 IR/ER strength at 0° abduction. 3. Negative apprehension and impingement signs.

PHASE II (BEGIN AT 6 WEEKS POST-OP) DATE:

APPOINTMENTS	Physician Appointment: Physical therapy 1x per 1-2 weeks.
PHASE II GOALS	1. Full AROM in all cardinal planes. 2. Progress ER range of motion gradually to prevent over stressing the repaired anterior tissues of the shoulder. 3. Strengthen shoulder and scapular stabilizers in protected positions (0°-45° abduction.) 4. Begin proprioceptive and dynamic neuromuscular control retraining.
PRECAUTIONS	1. Avoid passive and forceful movements into external rotation, extension and horizontal abduction.

SUGGESTED THERAPEUTIC EXERCISE	• AA/AROM in all cardinal planes-assessing scapular rhythm. • 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	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	1. Full AROM—Progress ER past neutral 2. Negative apprehension and impingement signs. 3. 5/5 IR/ER strength at 45° abduction.

PHASE III (BEGIN WHEN CRITERION PROGRESSION FROM PHASE II HAS BEEN MET~10-11 WEEKS) DATE:

APPOINTMENTS	Physician Appointment: Physical Therapy 1x every 2-3 weeks.
PHAES III GOALS	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	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 sports.
SUGGESTED THERAPEUTIC EXERCISE	<u>Motion</u> Posterior glides if posterior capsule tightness is present. More aggressive ROM if limitations are still present. <u>Strength and Stabilization</u>

	Flexion in prone, abd in prone, full can ex, D1 and D2 diagonals in standing. TB/cable column/dumbbell (light resistance/high rep) IR/ER in 90° abduction and rowing. Balance board in push-up position (with RS), prone swiss ball walk-outs, rapid alternating movements in supine D2 diagonal. CKC stabilization with narrow base of support.
CARDIOVASCULAR FITNESS	Walking, biking, stairmaster and running (if they have met PII criteria). <u>NO SWIMMING.</u>
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 WEEKS)

APPOINTMENTS	Physician Appointment: Physical Therapy 1x every 3 weeks.
PHASE IV GOALS	1. Pt to demonstrate stability with higher velocity movements and change of direction movements. 2. 5/5 rotator cuff strength with multiple repetition testing at 90° 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. **<u>LIFE-LONG PRECAUTION:</u> No weighted hyperextension/hyperabduction ie. No Bench Press or deep push ups**
SUGGESTED THERAPEUTIC EXERCISE	<u>Motion</u> Posterior glides if posterior capsule tightness is present. <u>Strength and Stabilization</u> 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.

	TB/cable column/dumbbell IR/ER in 90° abduction and rowing. Higher velocity strengthening and control, such as the inertial, plyometrics, rapid theraband drills. Plyometrics should start with 2 hands below shoulder ht and progress to overhead, then back to below shoulder with on hand, progressing again to overhead.
CARDIOVASCULAR FITNESS	Walking, biking, stairmaster and running (if they have met PII criteria). NO SWIMMING.
PROGRESSION CRITERIA	Patient may progress to Phase V if they have met the above stated goals and have no apprehension or impingement signs.

PHASE V (BEGIN WHEN GOALS AND CRITERIA FROM PHASE IV ARE MET, ~20 WKS)

APPOINTMENTS	Physician Appointment: Physical therapy 1x every 3 weeks.
PHASE V GOALS	1. Pt 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. **<u>LIFE-LONG PRECAUTION:</u> No weighted hyperextension/hyperabduction ie. No Bench Press or deep push ups**
SUGGESTED THERAPEUTIC EXERCISE	<u>Motion</u> Posterior glides if posterior capsule tightness is present. <u>Strength and Stabilization</u> 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. Initiate throwing program, overhead racquet program or return to swimming program depending on the athlete's sport. High velocity strengthening and dynamic control, such as the inertial, plyometrics, rapid thera-band drills.
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.