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ARTHROSCOPIC ANTERIOR CAPSULOLABRAL REPAIR REHABILITATION GUIDELINES

The following is a basic framework from which to work during rehabilitation following a shoulder labral repair, bankart repair, or capsulorrhaphy. However, it is critical to communicate with the surgeon in order to be aware of the condition of the tissue at the time of repair, any concomitant procedures that might have been performed, etc, that might impact the progression that is appropriate for each specific patient.

PHASE I (0-6 WEEKS)

PRECAUTIONS and ACTIVITY GUIDELINES

- Sling wear required 24 hours/day except for basic grooming, showering and home exercises per PT instruction for 4 weeks, followed by 2 week gradual wean from sling
- No active use of the operative arm or movement beyond range restrictions; no heavy lifting even with arm at side
- No stretching beyond PROM restrictions
- PROM restrictions (at 30 degrees abduction in scapular plane):

○	○ **0-3 weeks**	○ **3-6 weeks**
Elevation in scapular plane	○ 90	○ 120
ER(30 in scapular plane)	○ 30	○ 45
ER(45 in scapular plane)	○ NA	○ 30 (after week 4)
IR (45 in scapular plane)	○	○ As tolerated

- **AVOID** ER at 90 degrees abduction until after 6 weeks
- No driving while on narcotic pain medication; Sling must be worn if choosing to drive when weaned off pain meds unless sling removal cleared by surgeon
- No bathing until after suture removal and wounds are healed; may shower with water-proof covering over sutures (Tegaderm/Opsite) and it is suggested to wear a second sling for arm support during shower; suture removal during week 2 after surgery
- Return to work as determined by MD/PT dependent on work demands

GOALS

- Patient education about the nature of surgery, associated precautions and expected rehabilitation progression; emphasize that pain (lack thereof) cannot be guideline for progression
- Protection of surgically repaired tissue (capsule, ligaments, labrum, boney lesion)
- Minimize inflammation and pain
- Minimize shoulder stiffness
- Prevent atrophy/contractures of distal musculature and joints during sling use
- Establish a stable scapula
- Achieve – NOT TO EXCEED – PROM limits stated above

EXERCISES/PT INTERVENTIONS

- Wrist and elbow AROM (remove sling and use caution not to elevate G-H joint)
- Grip strengthening
- Passive elevation and ER per above restrictions
- Active scapular setting: retraction with depression; scapular clocks
- Supported pendulum
- Posture exercises as needed – eg. Seated active thoracic extension with scapular set
- Aquatic Therapy may begin at 2-4 weeks post op: AROM with shoulder totally submerged within range of motion limits. All motions should be done with correct biomechanics, include: scapular plane elevation, horizontal abduction/adduction, IR/ER at 0°, pendulums.

CRITERIA TO PROGRESS TO PHASE II

- PROM limits attained by week 6 (elevation to 120 degrees and ER neutral to 45 degrees)
- Minimal to no pain

PHASE II (6-12 WEEKS)

PRECAUTIONS/ACTIVITY GUIDELINES

- G-H PROM progressed toward full slowly without excessive force
- Avoid excessive or forced abduction and external rotation; **avoid ER >90** at 90 abduction
- Avoid heavy lifting in daily functional use; only use arm for lightweight activity below shoulder level
- No isokinetic strengthening or weight machines
- Sling wear discouraged (except when needed as visible sign of vulnerability in uncontrolled environment in first few weeks of this phase)
- May begin low impact activity such as jogging in controlled environment, elliptical trainer; lower body weight training (can include leg press machine)

GOALS

- Achieve full G-H PROM by 12 weeks but not sooner than 8 weeks
- Minimize/resolve any remaining shoulder pain
- Gain proximal G-H stability with progression from active assisted to active

EXERCISES/PT INTERVENTIONS

6-8 WEEKS POST-OP:

- PROM progressed slowly in clinic and with home exercise program; include posterior capsule/cuff stretches (cross body adduction, sleeper stretch, or hand slide up spine)
- Light manual periscapular and cuff strengthening (rhythmic stabilization at 90, IR/ER at 0° and 45°)
- Begin elevation progression from supine to reclined and then upright as able with good biomechanics; modify effort with lever arm short (bent elbow) to long (straight elbow) and with limb support (from cane or opposite UE or hand placement on wall, etc…) to unsupported

8-10 WEEKS:

- Grade I-IV G-H joint mobilizations, scapulothoracic joint mobilization if indicated stretching if full PROM has not yet been achieved
- Upper body ergometer (UBE) active exercise with little resistance and comfortable pace
- Rhythmic Stabilization (at 60, 90, and 120 in supine) with progression to PNF in a limited arc with progression to wider arcs

- G-H AROM in biomechanically correct ROM. Should include:
  - Supine serratus "punches", elevation in the scapular plane, sidelying ER, IR/ER with yellow Theraband at 0° of abduction, prone extension to hip with scapular retraction/depression

10-12 WEEKS - Add:

- Prone exercises – prone row, horizontal abduction and scaption (row, ←, T, & Y)
- Begin light resistive isotonic strengthening of rotator cuff and periscapular muscles (manual resistance, theraband, light dumbbells) in mid-ranges and progress to end ranges as tolerated

CRITERIA TO PROGRESS TO PHASE III

- Full AROM in all planes with good biomechanics (normalized scapulohumeral rhythm)
- Muscle strength 4/5 in rotator cuff and scapular stabilizers

<u>PHASE IV (3-6 months)</u>

PRECAUTIONS and ACTIVITY GUIDELINES

- Should be able to use the arm above shoulder level for lightweight activity initially and then progressing to work/sport specific activities
- Avoid overhead sporting activities until 6 months post surgery date, and at that time only if there is functional motion and strength for the sport/activity in question

GOALS

- Maximize strength of rotator cuff muscles, periscapular muscles, and humeral movers (deltoid, latissimus, and pectoralis)
- Functional progression back to work and/or sports
- Achieve full motion required for sport/work related activity (eg. Greater than 90 deg ER at 90 deg abduction in a thrower, tennis player, volleyball hitter, etc.) AVOID aggressive overstretching of the anterior capsule in the population with global laxity
- Integration of full kinetic chain for functional activities (eg. Trunk/hip influence on thrower)

EXERCISE/PT INTERVENTIONS

- G-H joint mobilizations and PROM when indicated
- Progress isotonic strengthening of rotator cuff, periscapular muscles and humeral movers as tolerated (hand weights, theraband, weight machines). Work at 20% of maximal effort with increased repetitions and decreased amount of weight
- Isokinetic rotator cuff strengthening in modified position (begin at 120-240°/sec.) Progress to 90° abduction (sitting or supine) and progress speed
- Begin and progress functional training (e.g. plyoball, work/sports-related skills) Refer to physician regarding higher levels of function such as throwing, overhead sports, contact sports
- Eccentric RC strengthening using plyoball , deceleration tosses, T-band
- Core strengthening/flexibility as indicated