Phase 1 (0-8 weeks post-op)

Rehabilitation Goals

- · Protect surgical repair
- Avoid a "stiff" shoulder

PRECAUTIONS

- NO elevation of shoulder past 90°
- Must ALWAYS wear sling/immobilizer for 6-8 weeks, even while sleeping
- NO jogging/running

Sling

Sling must be worn except during rehabilitation for the first 8 weeks after surgery

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

• Frequent use of ice

Weeks 1-3

- Elbow, Wrist, & Hand: ROM ex's, gripping, squeezing
- Gentle ("Two Finger") Isometrics: light pain free resistance (all directions)



Phase 1 (0-8 weeks post-op)

Weeks 4-6

- Modified Supine Pendulum
- Supine Assisted Shoulder Flexion limited to 90° and assisted with opposite hand
- Aerobic Conditioning on Stationary Bike (with sling on)

Weeks 7-8

- Scapular Retraction & Protraction
- Shoulder AROM exercises in Supine (Limited to 90° shoulder elevation)
- Lower Extremity Weight Lifting: May begin leg & calf press, hamstring curls, hip add/abd

Follow Up

- Physical Therapy: weekly or bimonthly
- Ortho: ~6-8 weeks post-op
- Supervised rehabilitation: 1-2 x per week as needed starting around 3-4 weeks post-op

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 ROM & strength



Phase 2 (9-16 weeks post-op)

Rehabilitation Goals

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

PRECAUTIONS

- Must wear sling/immobilizer until 6-8 weeks post-op except during rehabilitation (may begin weaning from sling at 8wks)
- NO repetitive overhead use of shoulder
- NO regular pushups, heavy lifting, or other sports participation

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

Weeks 9-12

- Shoulder AAROM exercises: Wand, pulley, towel stretch, sleeper's stretch, etc.
- May begin elliptical (legs only) and/or stairmaster for conditioning
- ER/IR strengthening with light theraband (with towel roll under arm)

Weeks 13-16

- Upper body cycle: begin with three 1-min sets (forwards and backwards) progress gradually
- Shoulder AROM exercises: (add mobilizations, other manual therapy as needed)
- Progressive strengthening: ER & IR with arm at side, FF & scaption to 60-90°, rows (first set: 20 repetitions, then 1 additional set at the same weight to muscle failure)
- May begin jogging (start with 5 minutes and progress gradually as tolerated)
- Beginning level neuromuscular/functional training exercises (see appendix)
- Beginning level shoulder stabilization exercises (see appendix)



Dr. Mark Slabaugh

301 St. Paul Pl. Baltimore MD 21202

Phase 2 (9-16 weeks post-op)

Follow Up

- Physical Therapy: bimonthly
- Ortho: ~3-4 months post-op
- Supervised rehabilitation: 2-3 x per week as needed

Documentation

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



Dr. Mark Slabaugh

Phase 3 (5-6 months post-op)

Rehabilitation Goals

- · Pushups at own pace without pain
- > 90% internal/external rotation strength return

PRECAUTIONS

• NO participation in contact/collision sports until 6-9 months post-op

Rehabilitation

- · 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

Weeks 17-20

- General upper quarter stretching: 5-10 minutes (shoulder, thoracolumbar spine)
- Progressive strengthening: ER/IR with shoulder in 30° elevation, FF/scaption to 60-90°, rows (first set: 15 reps, then 2 additional sets at the same weight to muscle failure)
- Intermediate level neuromuscular/functional training exercises (see appendix)
- Intermediate level shoulder stabilization exercises (see appendix)

Weeks 21-26

- Progressive strengthening: ER/IR with shoulder in 45-90° elevation, FF/scaption to 90-120°, (first set: 10-15 reps, then 2 additional sets at the same weight to muscle failure)
- May also begin general light intensity strengthening with shoulder in "safe" position (avoid heavy
 overhead lifting, avoid shoulders in the 90° elevation, 90° ER position) Intermediate/advanced level
 neuromuscular/functional training exercises (see appendix) Intermediate/advanced level shoulder
 stabilization exercises (see appendix)
- Progressive sports training: Begin at 25-50% intensity, progress gradually (see appendix)



Dr. Mark Slabaugh

Phase 3 (5-6 months post-op)

Follow-Up

- PT: Monthly
- Ortho: ~6 months post-op
- Supervised rehabilitation: 1-2 x per week as needed

Documentation

- Pain level medications and modalities
- Shoulder ROM & strength

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 pt progress.



Appendix

The following is a supplement to the rehabilitation guidelines on various types of shoulder exercises. The time frames listed are only for procedures specific to this protocol

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 ~ 13-16 weeks post-op	Intermediate Level ~ 17-20 weeks post-op	Advanced Level ~ 21-26 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, standing, prone on all fours	All fours stabilization on stable surface	All fours stabilization on foam or theraball
Supine Stabilization	Supine Shoulder Stabilization @ 90°	Supine Shoulder Stabilization from 60-120°	Supine Shoulder Stabilization (Available ROM)
Cuff Strengthening	Supine Shoulder Stabilization @ 90°	ER/IR - (30-45° shld scaption) FF/Scaption to 90-120° (Thumb up)	ER/IR- (45-90°shld scaption) - gradually moving into abd PNF patterns
Scapular Strengthening	Ceiling "punches" Rows	"Pushouts" (in standing) Rows (inferior/superior)	Pushup plus
Pushups	None	Wall pushups – progressing to inclined pushups	Knee pushups – progressing to modified regular pushups
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°	Basketball: noncontact drills only Golf: gradual return Vball: gradual return ~6 mo Pool: gradual return Forehand, backhand racquet sports (no overhead)