Johns Hopkins Shoulder Rehabilitation Protocol After Capsular Shift with Subscapularis Splitting Approach

Johns Hopkins Shoulder Surgeons

INTRODUCTION:

This summary of the evaluation and rehabilitation of a patient who is being treated with a shoulder stabilization procedure is designed to guide the therapist and patient. It consists of three parts: pre-operative evaluation, post-surgical rehabilitation, and data collection for study purposes. All are designed to help obtain the best possible result and provide data for the improvement of technique.

There are basically three phases of a rehabilitation program based upon the phases of wound healing. Shoulder reconstructions are basically a balance of healing of the capsule and structures of the glenoid versus the need to obtain range of motion. The goal is to obtain maximum obtainable range of motion without compromise of the surgical repair.

Most individuals after this operation should lose no more than five degrees of external rotation after surgery. However each patient should be individualized and there can be no cookbook approach to these patients.

Most activities are recommended for a majority of patients but it is not necessary that all patients do all exercises (e.g. medicine balls).

The ACUTE PHASE (inflammatory phase) consists of POD 1-21, the INTERMEDIATE PHASE (Reparative Phase) consists of post - op weeks 3 - 6, and the ADVANCED PHASE (Remodeling) consists of weeks 13-14.

PREOPERATIVE PHYSICAL THERAPY:

The goals of the preoperative evaluation are threefold:

1. To educate the patient about the surgery and rehabilitation process.

2. To instruct the patient on pre-operative strengthening.

3. To collect data necessary to compare pre-operative and post-operative motion and function.

Documentation -

The Physical Therapist records MMT, AROM, PROM

Education

1. Review program which is attached

2. Review expectations for recovery of motion and function

3. Answer questions* Preoperative Home Program

1. ROM

2. Strengthening—with tubing or weights:

a. Jobe exercises

b. Scapular stabilizers

c. Isometrics

3. Aerobic fitness

INPATIENT PHYSICAL THERAPY:

MD: MD changes bandage

P.T.:

POD #1: Begin finger, wrist and elbow AROM

POD #2: Begin Codman's pendulum exercises

(Note: in some revision cases these may not be initiated right away.)

Home Program (instruct prior to D/C)

1. AROM fingers, wrist, elbow

2. PROM in forward shoulder flexion to full range, opposite arm cradle

3. Codman's

4. PROM for abduction in scapula plan

5. PROM ER in this position to operative limit

6. Shower POD #5

7. Arrange office visit and P.T. visit with staff on that day

8. Ice therapy

OUTPATIENT THERAPY

Days 8 - 14

1. Sutures removed by MD

2. Wear immobilizer to sleep for approximately 2 weeks (may be exceptions)and for most of the day

3. Begin P.T.

a. 2 - 3 x per week (usually 2 x)

b. Wand extension-flexion supine

c. Prone Codman's

d. AAROM for ER in adduction to operative limit as determined by MD

e. PROM in abduction in scapular plane, PROM ER in this position to operative limit

f. Begin shoulder pinches (scapular retraction) and depression (discourage shrug or "wound wing sign")

g. AROM in flexion and anterior to plane of scapula as pains allows, to maximum of 1500

4. Standing active forward flexion internal and external rotation with no weights, proper mechanics up to, but not over shoulder height

5. Home Program

a. 3 - 5 x per day

b. Continue PROM in ER to operative limit with arm at side using cane or assisted by family member

Days 15 - 21

1. Continue immobilizer to sleep (determined by MD); Can go without the immobilizer during the day.

2. ROM as above

3. Isometric flexion below shoulder level, submaximal isometric external rotation

Weeks 3 - 6

Avoid tendonitis and impingement

1. Begin Jobe's program--begin with lightest tubing, progress as tolerated (or may use weight of arm, but then increase with dumbbells in one pound increments)

2. Progress to light resistance (2-3 lbs.)

3. If mechanics are normal and painless, add manual resistance to serratus anterior (caution, see #8 below)

4. Add IR/ER week 5 - 6 (1 - 2 lbs.) sidelying or tubing

5. Full ROM forward flexion

6. Full ROM abduction; verbal and visual feedback to correct any scapular compensation

7. Progress ER as tolerated (PROM): Focus at this stage is mostly for increasing ER.

8. Avoid and aggressively treat any biceps tendinitis

Weeks 7 - 8

Avoid tendonitis and impingement

1. Normal ER at side by week 8 (actively), at least within 10 degrees of normal

2. Jobe's 5 lbs.

3. IR/ER 5 lbs. sidelying

4. Medicine ball chest passes (2-6 lbs.), progress to overhead throwing then to side passing

5. Continue above exercises, avoiding compensatory shoulder shrugs.

Weeks 9 - 12 1. Full AROM

2. Biceps curl, light empty can (less than 60 degrees ABD in scapular plane)

3. Isokinetic IR/ER, FF, ABD test week 12 as needed

Weeks 13 - 14

1. Begin formal weight training except half-bench only (No behind the frontal plane, i.e. keep elbows in front of body for all weight work)

2. Begin throwing program if ER within 5 degrees, all else normal

SPECIAL CONSIDERATIONS 1. Revisions cases will vary according to the amount of scar and the perceived chance of recurrence. Some will need to be held back and some will need to be pushed depending upon the findings at surgery.

2. All IR, ER, and ABD to be done in scapular plane.

3. Avoid any impingement signs at all stages; note all symptoms per protocol for further study.

4. Any questions contact the surgeon.