

PHYSICAL THERAPY PRESCRIPTION

FRANK A. PETRIGLIANO, MD

CHIEF – DIVISION OF SPORTS MEDICINE
HEAD TEAM PHYSICIAN – LA KINGS
ORTHOPAEDIC SURGERY AND SPORTS MEDICINE
USC DEPARTMENT OF ORTHOPAEDIC SURGERY
323.442.5822 OFFICE
323.865.5480 FAX



Keck Medicine of USC

PATIENT STICKER

DATE OF SURGERY: _____

DIAGNOSIS: (LEFT / RIGHT) ULNAR COLLATERAL LIGAMENT RECONSTRUCTION

ULNAR COLLATERAL LIGAMENT RECONSTRUCTION PHYSICAL THERAPY PRESCRIPTION

IMMEDIATE POST OPERATIVE PHASE (0 - 3 weeks)

Goals:

- Protect Healing Tissue
- Decrease Pain/Inflammation
- Retard Muscular Atrophy
- Establish Limited Range-of-Motion

Post-Operative Week 1:

- Brace: Posterior splint at 90-degree elbow flexion
- Range-of-Motion: Wrist AROM extension/flexion
- Exercises:
 - ★ Gripping exercises
 - ★ Wrist ROM
 - ★ Shoulder Isometrics (no shoulder ER for first 14 days)
 - ❖ Internal rotation
 - ❖ Flexion/extension
 - ❖ Abduction/adduction
 - ❖ Biceps isometrics
- Cryotherapy

Post-Operative Week 2:

- Brace: Application of functional brace set at 30-100 degrees
- Exercises:
 - ★ Initiate shoulder ER isometrics (day 14)
 - ★ Initiate wrist isometrics
 - ★ Initiate elbow extension isometrics
 - ★ Continue all exercises listed above

Post-Operative Week 3:

PHYSICAL THERAPY PRESCRIPTION

- Brace: Advance brace 15-110 degrees (gradually increase ROM – 5-degree extension/10-degree flexion per week)
- Exercises:
 - ★ Initiate light isotonics (no weight, use the weight of the arm)
 - ★ Shoulder abduction
 - ★ Shoulder elevation
 - ★ Scapular strengthening
 - ★ Biceps/triceps
 - ★ Wrist flexion/extension
 - ★ Forearm pronation/supination
 - ★ Initiate tubing ER/IR at 0° abduction
 - ★ Continue ROM and gripping exercises

INTERMEDIATE PHASE (weeks 4-8)

Goals:

- Gradual increase in ROM
- Promote repair of healed tissue
- Re-gain and improve muscular strength

Week 4:

- Brace: Functional brace set 15-120°
- Exercises:
 - ★ Begin light weight resistance exercises for arm (1lb.)
 - ★ Wrist curls, extensions, pronation, supination
 - ★ Elbow flexion/extension
 - ★ Progress shoulder program, emphasize rotator cuff strengthening
 - ❖ Emphasis on external rotation, side lying

Week 6:

- Brace: Functional brace set 0-130 degrees; AROM 0-145 degrees without brace; Discontinue brace at the end of week 6
- Exercises:
 - ★ Progress wrist and elbow strengthening exercises
 - ★ Progress shoulder program

Week 8:

- Exercises:
 - ★ Continue Stretching Program for Elbow and ROM
 - ★ Gradual progress of strengthening program

ADVANCED STRENGTHENING PHASE (weeks 9-13)

Goals:

- Increase strength, power and endurance
- Maintain full elbow ROM
- Gradually initiate sporting activities

Exercises:

- ★ Initiate eccentric elbow flexion/extension
- ★ Triceps strengthening
- ★ Continue isotonic program; forearm and wrist
- ★ Continue shoulder program

PHYSICAL THERAPY PRESCRIPTION

RETURN TO ACTIVITY PHASE (weeks 16+)

Goals:

- Continue to increase strength, power and endurance of upper extremity musculature. Gradual return to sport activities

Week 16:

- Initiate Interval Throwing Program (Phase 1)

Weeks 28:

- Progress to Interval Throwing Program (Phase 2)
- Upon painless completion of Phase 2, progress to competitive throwing program (approx. 9 months).

Treatment: _____ times per week **Duration:** _____ weeks

Physician's Signature: _____

Frank A. Petrigliano, MD, Attending Orthopaedic Surgeon, USC

PHYSICAL THERAPY PRESCRIPTION

INTERVAL THROWING PROGRAM PHASE 1

** Throwing is performed every other day. Pre-throwing and post-throwing exercises must be performed.

** Each Stage should be one week. If pain occurs during any stage, back up to previous stage.

Phase I: Long Toss program

45-ft. Stage

- a. Warm-up throwing
- b. 45 ft. (25 throws)
- c. Rest 15 min.
- d. Warm-up throwing
- e. 45 ft. (25 throws)

60-ft. Stage

- a. Warm-up throwing
- b. 60 ft. (25 throws)
- c. Rest 15 min.
- d. Warm-up throwing
- e. 60 ft. (25 throws)

90-ft. Stage:

- a. Warm-up throwing
- b. 90 Ft. (25 throws)
- c. Rest 15 min.
- d. Warm-up throwing
- e. 90 ft. (25 throws)

120-ft. Stage:

- a. Warm-up throwing
- b. 120 ft. (25 throws)
- c. Rest 15 min.
- d. Warm-up throwing
- e. 120 ft. (25 throws)

150-ft. Stage:

- a. Warm-up throwing
- b. 150 ft. (25 throws)
- c. Rest 15 min.
- d. Warm-up throwing
- e. 150 ft. (25 throws)

PHYSICAL THERAPY PRESCRIPTION

180-ft. Stage:

- a. Warm-up throwing
- b. 180 ft. (25 throws)
- c. Rest 15 min.
- d. Warm-up throwing
- e. 180 ft. (25 throws)

Then begin throwing from mound or to respective position.

INTERVAL THROWING PROGRAM PHASE 2

** Throwing is performed every other day. Pre-throwing and post-throwing exercises must be performed.

Phase II: Starting Off the Mound

Stage I: Fastball Only

Step 1:

- a. Interval throwing
- b. 15 throws from mound 50%

Step 2:

- a. Interval throwing
- b. 30 throws from mound 50%

Step 3:

- a. Interval throwing
- b. 45 throws from mound 50%

Stage II: Fastball Only

Step 4:

- a. Interval throwing
- b. 60 throws from mound 50%

Step 5:

- a. Interval throwing
- b. 30 throws from mound 75%

Step 6:

- a. 30 throws from mound 75%
- b. 5 throws from mound 50%

PHYSICAL THERAPY PRESCRIPTION

Stage III: Fastball Only

Step 7:

- a. 45 throws from mound 75%
- b. 15 throws from mound 50%

Step 8:

- a. 60 throws from mound 75%

Stage IV: Fastball Only

Step 9:

- a. 45 throws from mound 75%
- b. 15 throws in batting practice

Step 10:

- a. 45 throws from mound 75%
- b. 30 throws in batting practice

Step 11:

- a. 45 throws from mound 75%
- b. 45 throws in batting practice

Stage V:

Step 12:

- a. 30 throws from mound 75% warm-up
- b. 15 throws from mound 50% breaking balls
- c. 45-60 throws in batting practice throws from mound 50% (fastball only)

Step 13:

- a. 30 throws from mound 75%
- b. 30 breaking balls 75%
- c. 30 throws in batting practice

Step 14:

- a. 30 throws from mound 75%
- b. 60-90 throws in batting practice 25% breaking balls

Step 15: Simulated game processing by 15 throws per work-out.

Use interval throwing to 120-ft. phase as warm-up. All throwing from the mound should be done in the presence of the pitching coach to stress proper throwing mechanics. A speed gun should be used to aid in effort control.

PHYSICAL THERAPY PRESCRIPTION