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**Ulnar Collateral Ligament Reconstruction**

Post-Operative Protocol

**Post-Op – Week 1 (Day 1- Day 7):**

Splint is worn for one week at 90 degrees

Transition to post-op hinged elbow brace with full ROM

Gripping exercises with a soft ball or rolled towel the day after surgery

Finger and wrist AROM (NO RESTRICTION) if splint allows.

Full non-painful AROM: supination, pronation, radial & ulnar deviation

Very light stretch of wrist & fingers

Isometric exercises: Shoulder (NO ER); Bicep

Knee PROM (if gracilis graft)

Use crutch PRN for 3-5 days (if gracilis graft)

Day 3- Day 6: Initiate recumbent bike (very light work; no sweating)

**Week 2 (Day 8 – Day 14):**

\*Day 8- Day 10: Brace ROM set to 0-120 degrees at post-op visit (this setting used for 5 weeks)

3 times per day: out of brace to work on elbow extension

Continue exercises above

Isometric exercises: Add elbow extension

Low level abdominal exercises (NO UPPER EXTREMITY USE)

**Week 3 (Day 15 – Day 21):**

Light hamstring stretch (if gracilis graft)

Light hamstring isometrics (if gracilis graft)

Progress to light wrist stretching (if palmaris longus)

Progress abdominal/core strengthening exercises (NO UPPER EXTREMITY USE)

Shoulder AROM (BRACE ON; NO WEIGHT)

Full can

Abduction

ER/IR (wrist neutral – very light resistance)

Elbow flexion/extension (no more than 1lb.)

Scapular retraction-rows (sitting, forearms on table, wrist in neutral)

Light scapular strengthening

Lower extremity exercises (NO RESISTANCE THROUGH THE ARM)

Straight leg raise

Hip abduction/adduction

Hip IR/ER

Upright, stationary bike (may start sweating during activity

Light scar massage over graft site/distal incision as soon as incision is closed for at least two days

**Week 4 (Day 21 – Day 28): \*See attached for Shoulder and Scapula Programs\***

Program 1: Shoulder – Exercises 1, 2 & 7 (no more than 1 lb.)

Program 2: Shoulder – Exercises 1, 2, & 3 (no weight)

Program 4: Scapula – Exercises 5, 6, 7 & 8 (no weight; palm down/forearm neutral)

Wrist exercises

Flexion/Extension

Supination/Pronation

Radial/Ulnar deviation

Elbow Flexion/Extension (progress to 2 lbs.)

Leg machine exercises (NO HOLDING WITH ARM; NO PRESSURE/PULSING IN ARM)

**Week 5 (Day 28 – Day 35):**

Progress previous Shoulder and Scapula exercises in Programs 1, 2 and 4 by 1 lb.

Progress elbow flexion/extension to 3 lbs.

UBE: No resistance

**Week 6 (Day 36- Day 42):**

Discontinue brace at 6 weeks post-op (42 days)

Progress previous Shoulder and Scapula exercises in Programs 1, 2 and 4 by an additional 1lb.

Progress other allowed exercises to 4-5 lbs.

Increase lower extremity exercises to medium intensity

Progress lower extremity exercises (if gracilis graft). Progress as tolerated.

UBE: Gradually progress resistance as tolerated

**Week 7 (Day 43 - Day 49):**

Initiate light manual ROM with elbow protected (SHOULD NOT HAVE PAIN)

Shoulder, Elbow, Wrist/forearm

Progress elbow flexion and extension to 5-7 lbs.

Initiate shoulder ER exercises to complement existing Shoulder/Scapular exercises

Program 1: Shoulder (may perform all exercises; see attached Program)

Program 4: Scapula (may perform all exercises: see attached Program)

**Week 8 (Day 50 – Day 56):**

1A. Diagonal Pattern D2 Extension

1B. Diagonal Pattern D2 Flexion

2A. External Rotation at 0 degrees Abduction

2B. Internal Rotation at 0 degrees Abduction

3. Shoulder Abduction to 90 degrees

4. Scaption, Full can

5. Sidelying External Rotation

6A. Prone Horizontal Abduction (Neutral)

6B. Prone Horizontal Abduction (Full ER, 100 degrees Abduction)

6C. Prone Rows

6D. Prone Rows into External Rotation

7. Press-ups

8. Push-ups (start on wall and progress to floor)

9A. Elbow Flexion

9B. Elbow Extension (Abduction)

10A. Wrist Extension

10B. Wrist Flexion

10C. Supination

10D. Pronation

Progress manual ROM to medium intensity

May initiate eccentric loading

May start treadmill jogging

**Week 9 (Day 57 - Day 63):**

Continue Week 8 exercises

2-handed plyometrics (ie: chest pass, side-to-side)

Gradually progress treadmill jogging to outdoor jogging

**Week 10 (Day 64 – Day 70):**

Continue Week 8 exercises

Outside agility and low-level, lower body plyometric activities

Initiate bodyblade exercises

(ONLY BELOW 90 degrees of shoulder flexion &/or abduction with elbow straight. Can perform shoulder ER/IR at 0 degrees of shoulder flexion & abduction)

**Week 11 (Day 71 – Day 77):**

Continue Week 8 exercises

Progress the 2-handed plyometrics (ie: overhead soccer throws, overhead throw downs, side-chops)

**Week 12 (Day 78 – Day 91):**

Continue Week 8 exercises

Initiate large muscle groups with machine exercises (ie: bench press, lat pull-downs)

Progress to running if there is no swelling or pain

May start swimming

**Week 13 (Day 92 – Day 98):**

Continue Week 8 exercises and Shoulder/Scapula Exercises

Initiate high repetition (30), light weight dumbbell exercises for the upper extremity

Progress upper extremity machine work to medium weight and reps of 20

May golf

**Week 14 (Day 99 – Day 105):**

Continue Week 8 exercises, adding ER/IR at 90 degrees Abduction and Empty Can exercises

Program 2: Shoulder (may perform all exercises: see attached Program)

Program 3: Shoulder (may perform all exercises: see attached Program)

1-handed plyometric (ie: wall dribble, deceleration catch, 90/90 throw)

**Week 15 (Day 106 – Day 112):**

Continue Week 8 exercises and Shoulder/Scapula Exercises

Progress to medium weight dumbbell exercises for the upper extremity with repetitions of 20

**Week 16 (Day 113 – Day 119):**

Continue Week 8 exercises and Shoulder/Scapula Exercises

Positional player may initiate interval hitting program

**Week 17 – Week 21 (Day 120 – Day 154):**

Continue Week 8 exercises and Shoulder/Scapula Exercises

\*May return to normal training at Week 17 Post-Op

Continue to work on strength, power and endurance

**Week 19**

Positional players may initiate rehabilitative throwing program

**Week 20**

Pitchers may begin hitting progression program

**Week 22 (Days 155 & beyond):**

Continue Week 8 exercises and Shoulder/Scapula Exercises

Pitchers may Initiate Rehabilitative Throwing Program

**Shoulder/Scapula Exercises**

These exercises and stretches were designed to work on the flexibility and strengthening of your shoulder/scapula muscles. They will help ensure that your body is moving properly; decreasing the stress on your shoulders and elbows. You should also stretch your lower body muscles to ensure a proper kinetic chain.

If you are a competitive overhead athlete, these exercises/stretches will continue to be a part of your prehab throughout your athletic career. This program should be initiated **six weeks** before your season starts and continued throughout your season. During the off season, you will continue to perform the exercises; however, you will not need to perform them as often (about 50% as much).

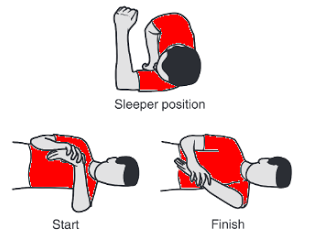
Perform your lower body stretching and your sleeper stretch three times per day. From the program, pick one or two exercises from each of the four pages to perform; making sure to rotate through all of them. These exercises should be performed every other day.

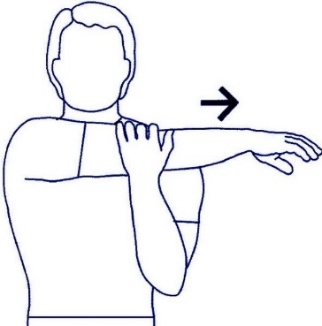
**VIDEO LINK: Shoulder/Scapula Exercise Videos for Overhead Athlete Program on YouTube.**

**https://youtube.com/playlist?list=PLQaGCY5jUuj1-PYdqByD-3JoYSbVSMMOU**

\*Perform the following stretches:

**Sleeper stretch Cross body horizontal**

 **adduction stretch**



**Sleeper stretch:** Lie on your side on a firm, flat surface with the affected shoulder under you and your arm bent. You can place your head on a pillow for comfort, if needed.

Use your unaffected arm to slowly push your affected arm down towards the hard surface. You should feel a stretch in the back of your affected shoulder.

**Cross body stretch:** Stand with good posture. Cross your arm over your chest and hold. If you do not feel a stretch, hold this position while trying to squeeze your shoulder blades together. You should feel a stretch in the back of your affected shoulder.

Hold both positions for 30 - 45 seconds. Perform 3 - 4 reps of each, 3 - 4 times per day.

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A screenshot of a page with images of a person doing exercises

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