Connecticut Orthopaedics

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KC Royals Rehab Protocol
Post-op UCL Reconstruction

Surgery day – 1 week Post-Op (Days 0–7)

- Splint is worn for one week at 90°
- Start gripping exercises with a soft ball or rolled towel first day post-operative
- Start finger and wrist AROM (NO RESISTANCE) if splint allows.
  - Full non-painful AROM: supination, pronation, radial & ulnar deviation
  - Very light stretch of wrist & fingers is okay.
- Start shoulder isometrics (with NO ER)
- Start bicep isometrics
- Start knee PROM (if gracilis graft)
- Use crutch PRN for 3 – 5 days (if gracilis graft)
- Day 3 – 5 PO initiate recumbent bike very lightly (no sweating to decrease risk of getting perspiration in or on the wound, increasing the risk of infection)
- Day 5 – 7 PO initiate Brace ROM 30–100° and compression dressing to elbow
  - Gradually increase ROM 10° (5° if brace style allows) Extension & 10° Flexion every 5 - 7 days as ROM allows.
- Day 7 – 10 PO initiate compression dressing to wrist or calf (if gracilis or Palmaris longus)

1 week PO – 2 weeks PO (Days 7–14)

- Initiate elbow extension isometrics
- Initiate light scar massage over graft site/distal incision as soon as incision is closed for two days
- Initiate low-level, supine, hook-lying TrA exercises (feet on table activities only)

2 weeks PO – 3 weeks PO (Days 14–21)

- Remove stitches day 10-14
- 5 – 7 days after initiating the elbow brace at 20–110° increase to 10–120°.
- Initiate light hamstring stretch (if gracilis graft)
- Initiate light hamstring isometrics (if gracilis graft)
- Progress to light wrist stretching (if Palmaris longus)
- Progress TrA exercises as able (No load through upper extremities)
- Initiate other abdominal & lumbar activities (No load through upper extremities)
- AROM of the shoulder (With brace on - NO WEIGHT)
  1. Full can
  2. Abduction
  3. ER/IR (Wrist neutral – very light/yellow to red theraband)
  4. elbow flexion/extension (1 lb)
  5. Table top (forearms on table, wrist in neutral) scapular retraction-row)
- Initiate light scapular strengthening
- Initiate upright, stationary bike (may start sweating during activity)
- Initiate lower extremity exercises (NO RESISTANCE THROUGH THE ARM)
  1. straight leg raise
  2. seated straight leg raise
  3. hip abduction
  4. hip adduction

5. hip internal rotation
6. hip external rotation
7. calf raises

3 weeks PO – 4 weeks PO (Days 21–28)

- Initiate isometrics for calf (if gracilis graft)
- Initiate Program 1: Shoulder – Exercises 1, 2 & 7 (0-1 lb only)
- Initiate Program 4: Scapula – Exercises 5-8 (Prone "Y," "T," & "A")
  - Palm down/forearm neutral (arm weight only)
- Initiate Program 2: Shoulder – Exercises 1-3 (arm weight only)
- Initiate stabilization for shoulder and wrist
- Initiate shoulder motions
- Initiate leg machine exercises (THERE SHOULD BE NO FEELING OF PRESSURE OR PULSING IN THE SURGERY ARM. NO HOLDING ON WITH THE SURGERY ARM)
- Initiate wrist exercises
  1. flexion
  2. extension
  3. supination
  4. pronation
  5. radial deviation
  6. ulnar deviation
- Progress to 2 lb - elbow flexion and extension

4 weeks PO – 5 weeks PO (Days 28–35)

- Discontinue brace (except for crowded situations)
- Progress previous Shoulder & Scapular Exercises by 1 lb
- Progress elbow flexion and extension to 3 lb
- Initiate UBE with no resistance

5 weeks PO – 6 weeks PO (Days 35–42)

- Discontinue brace
- Initiate rice bucket
- Progress previous Shoulder & Scapular Exercises by an additional 1 lb
- May progress other allowed exercises to 4-5 lb
- Increase lower extremity exercises to medium intensity (reps of 20 – 30)
- Initiate lower extremity exercises (if gracilis graft). Progress at pt tolerance.

5 weeks PO – 6 weeks PO (Days 35–42) [continued]

- May initiate elliptical machine conditioning
- Progress UBE into resistance gradually per patient tolerance

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6 weeks PO – 7 weeks PO (Days 42–49)

- Initiate light manuals with elbow protected (SHOULD NOT HAVE PAIN)
    1. shoulder
    2. elbow
    3. wrist/forearm
- Progress elbow flexion and extension to 5-7 lb weights
- Initiate shoulder ER exercises to compliment existing shoulder/scapular exercises
- Can now perform all exercises for Program 1 – Shoulder
- Can now perform all exercises for Program 4 – Scapula

7 weeks PO – 8 weeks PO (Days 49–56)

- May progress manuals to medium intensity
- May initiate eccentric loading
- May initiate treadmill jogging

8 weeks PO – 9 weeks PO (Days 56-63)

- Initiate 2-hand plyometrics
    1. chest pass
    2. side-to-side
- May progress treadmill jogging into treadmill & outdoor running.

9 weeks PO – 10 weeks PO (Days 63–70)

- May initiate outside agility & low-level, lower body plyometric activities
- May initiate bodyblade exercises ONLY BELOW 90° of shoulder flexion &/or abduction & with elbow straight (Can do shoulder ER/IR at 0°of shoulder flexion & abduction)

10 weeks PO – 11 weeks PO (Days 70-77)

- Progress 2-hand plyometrics
    1. Overhead soccer throws
    2. Overhead throw downs
    3. Side chops

11 weeks PO – 13 weeks PO (Days 77–91)

- May initiate machine ex's of big muscle groups (bench press, lat pull down)
- May initiate running if no swelling or pain.
- May initiate swimming.

13 weeks PO - 14 weeks PO (Days 91–98)

- May initiate high rep(30), light weight dumbbell exercises for the upper extremity
- May progress upper extremity machine work to medium weight and reps of 20.
- May initiate golf.

14 weeks PO – 15 weeks PO (Days 98–105)

- May initiate 90/90 and empty can into T-ten program
- Can now perform all exercises for Program 2 – Shoulder
- Can now perform all exercises for Program 3 – Shoulder
- May initiate 1-hand plyos
  1. wall dribble
  2. deceleration catch
  3. 90/90 throw
  4. external rotation into physio ball

15 weeks PO – 16 weeks PO (Days 105–112)

- May initiate medium weight dumbbell exercises and reps of 20.

16 weeks PO – 17 weeks PO (Days 112–119)

- May initiate interval hitting program (position player)
- May do normal training (week 17 PO [Day 119])

20 weeks PO (Days 140 & beyond)

- Initiate Kansas City Royals rehab throwing program