

R. JOHN ELLIS, JR., M.D.
LAWRENCE A. SCHAPER, M.D.
MARK G. SMITH, M.D.
G. JEFFREY POPHAM, M.D.
AKBAR NAWAB, M.D.
MICHAEL L. SALAMON, M.D.
MATTHEW R. PRICE, M.D.



DANIEL E. RUEFF, M.D.
SEAN M. GRIFFIN, M.D.
BRENT J. SINICROPE, M.D.
EVAN RHEA, M.D.
KELSI J. BARNES, PA-C
JENNIFER R. STREET, PA-C

ACL RECONSTRUCTION PROTOCOL

PRE-OP

- Perform preoperative evaluation with LROM brace fitting.
- Begin preoperative rehabilitation program to regain range of motion, strength, and normalize gait pattern
- Explain pre- and post-surgery goals
- Patient and family education regarding surgical procedures and current pathology

1-4 DAYS POST-OP

Restrictions

- Wear LROM brace locked at 0° while sleeping or walking, otherwise it may be removed for exercises as needed
- Emphasize terminal knee extension, unless posterior-lateral complex injury
- Cryotherapy as often as tolerated without direct contact to the skin
- Ambulate WBAT with crutches and LROM brace locked in full extension (unless otherwise instructed by MD)
- Elevate lower extremity with knee straight (no pillows underneath the knee)
- Notify physician if fever of 100° or more

Rehabilitation

- Began postop program day 1-2
- Passive knee extension but towel roll under heel or prone leg hangs for 5-10 minutes, 3 times a day
- Active or active-assistive heel slides in long sitting position.
- Quad sets on small towel (to better engage the quads)
- Straight leg raises 2-3 times per day with assistance until patient can reduce knee extension lag to less than 15°
- Patella mobilizations as tolerated
- Gravity assisted knee flexion off of the table or heel slides on floor while in a chair (ie. for meals)
- AROM of the ankle/ankle pumps/DVT prevention
- Gastrocnemius and Soleus stretches
- Hamstring stretches in long sitting

EASTPOINT OFFICE
13151 MAGISTERIAL DRIVE, SUITE 200
LOUISVILLE, KENTUCKY 40223
Telephone 502-587-1236
Fax 502-587-0126

BOOKKEEPING DEPARTMENT
5120 DIXIE HIGHWAY, SUITE 103
LOUISVILLE, KENTUCKY 40216
Telephone 502-587-7269
Fax 502-587-0318

SOUTHEND OFFICE
5120 DIXIE HIGHWAY, SUITE 103
LOUISVILLE, KENTUCKY 40216
Telephone 502-449-0449
Fax 502-449-3277

4-14 DAYS POST-OP

Restrictions

- Continue weight-bearing, as tolerated with crutches and LROM brace locked at 0°
- Continue elevation and cryotherapy
- Continue sleeping with the brace locked at 0°
- May shower after all the postoperative dressing is removed (usually day 3) and adequate leg control returns
- Monitor incision for appropriate healing, but notify physician if increased redness or drainage continues

Rehabilitation

- Goal: > 90° of flexion with at least 0° extension
- Continue all exercises from previous phase
- Hamstring isometrics (may need to wait if hamstring autograft)
- 4 – way SLR when adequate leg control returns
- Side-lying hip ER strengthening
- Begin weight-shift exercises out of the brace as weight-bearing restrictions allow
- Once full weight-bearing, initiate bilateral calf raises
- Gait training, in-line walking, cones forwards and lateral
- Modalities as needed for pain/effusion

14-28 DAYS POST-OP

Restrictions

- Continue cryotherapy
- Decrease crutches from 2 to 1 to none as proper leg control is achieved
- Emphasize normal walking pattern
- May stop sleeping in brace if full extension is achieved

Rehabilitation

- Advance previous exercises as tolerated with ankle weights starting above the knee working towards below the knee
- Increase range of motion to within normal limits as tolerated
- Begin partial squats, bilateral>> resisted>> unilateral
- Begin forward step ups: Start at 4 inches>> 6 inches>> 8 inches

- Begin stationary bicycle for ROM
- Begin active hamstring curls, progress to resistive as tolerated
- Began single leg stance exercises for proprioception/balance, static>> dynamic
- Active knee extension in a SAQ ROM only 45° - 0° if no patellofemoral pain
- Scar massage/mobilization as needed

4-8 WEEKS POST-OP

Restrictions

- Must enforce a normal gait pattern
- Must regain normal range of motion
- No running, jumping, or plyometric activities yet

Rehabilitation

- ***Protect patellofemoral joint and adjust exercises accordingly***
- May begin aquatic therapy once incision is completely healed
- Advanced CKC exercises to leg press, bilateral>> unilateral, eccentrically focused
- Advanced balance and proprioceptive retraining
- Advanced to 4 way hip machine, Stairmaster, elliptical trainer, hamstring curl machine as tolerated
- Advanced stationary cycling to endurance training>> interval training

8-12 WEEKS POST-OP

- Advance CKC strengthening, focusing on sport specific routine
- Advance proprioception and balance routine, BOSU, Therapad, Rebounder, SportKat, etc.
- Measure for functional knee brace

12-16 WEEKS POST-OP

- If muscle tone, strength and proprioception are sufficient, start light jogging program (no cutting or pivoting)
- Begin light agility drills, advancing from to leg activities to single leg
- Begin plyometrics, advance from to leg activities to single leg
- Began light sport specific drills

4-6 MONTHS POST-OP

- Continue strengthening, plyometrics, proprioception, agility training, sport running program
- Advance sport specific drills
- Return to normal activity after being released by the physician.