

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

MENISCUS TRANSPLANT PROTOCOL

GENERAL GUIDELINES:

- CPM machine at 0° - 40° for the first few days, then increase by 5° increments every other day as tolerated until 90° is reached. Utilize CPM for at least 4-6 weeks unless otherwise instructed by M.D.
- Nonweightbearing to Toe Touch Weight Bearing with crutches in the brace for 6 weeks.
- Increase weight bearing gradually after 6 weeks and start weaning from crutches and the brace once gait presents without compensations or instabilities.
- Initially, brace should be locked at 0° and then unlocked to 60° when adequate quadriceps control is established. Unlock to 90° as tolerated at 4 weeks postop.
- Sleep in the brace unless otherwise instructed by M.D.
- Keep the entire leg elevated. Do not place pillows under the knee for long periods of time.
- Utilize cryotherapy for 20 to 30 minutes every hour for pain and swelling reduction.

Weeks 0-3

- Restore patellar mobility.
- Restore FULL knee extension within 2 weeks (low load-long duration stretching).
- Hamstring, gastrocnemius, and ITB stretching.
- Ankle ROM/strengthening for swelling and DVT prevention.
- PROM of knee (goal of 0°-90°)
- 4-way open chain straight leg exercises.
- *Focus on knee remaining locked in concentric and eccentric phase. Increase reps and hold time initially, before adding resistance. No ankle weight until extensor lag is eliminated.*
- Modalities as needed for pain and swelling.
- NMES for Quadriceps activation and re-education.

Weeks 4-6

- Increase ROM as tolerated (goal of 0°-120°)
- Continue to increase hip resistance during open chain exercises as tolerated (progress to multihip machine)
- Knee extension

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

- Calf raises
- May start light aquatic exercises once good Quadriceps control is established. (*Maintain 0-90° restriction*)
- Isometric hamstring strengthening on a ball.
- Initiate stationary bike for range of motion without resistance.

Weeks 7-12

- ROM as tolerated.
- Increase resistance with all exercises as tolerated.
- Hamstring curls to 90° with resistance as tolerated.
- Increase leg strength allow for normal gait and walking longer distances.
- Start closed chain exercises as tolerated in a protected range. (1/3 Partial Squats, proprioceptive exercises, BAPS board)
- Leg press (0°-60°) with light resistance and high repetitions. (9-12 weeks postop)
- Increase resistance with stationary bike for strength and endurance training.
- Edema control.

Months 3-6

- Low impact weight program increasing intensity of strength and functional training for a gradual return to normal activities.
- Elliptical trainer.
- Core strengthening.
- Regain Quad/hamstring girth and tone.

Months 6-9

- Sport specific training (if applicable).