



# INOVA<sup>®</sup>

## Sports Medicine

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### Physical Therapy Protocol Following Open Proximal Hamstring Repair

Weight Bearing Status – **Non-weight bearing for 4 weeks**

#### Post-Op Weeks 2-4:

- First post-op visit with physician at 10-14 days
- Non weight bearing the entire 4 weeks (toe touch is permitted for balance)
- Knee brace is to be locked at 40 degrees and crutches used for full 4 weeks
- Gentle semi-reclined position can be assumed with small towel roll under the knee to reduce hamstring tension and reduce knee stiffness
- Therapeutic exercises include quadriceps sets (15 reps 3-4 times per day) and ankle pumps (20-30 reps per hour). Additionally, light desensitization massage to the incision and posterior hip may be used to minimize discomfort and reduce hypersensitivity
- Brace may be removed for physical therapy
- Discontinue brace approximately 4 weeks after surgery depending on repair strength but keep using crutches for stability

#### Phase II (Weeks 4-8)

- Brace is discontinued after 4 weeks and begin to wean from crutches
- Progressive WBAT starting week 4 (25%, 50%, 75%, 100%)
- Standing hamstring curls is initiated with hip joint held in neutral and lower leg moving against gravity in pain free arc. Resistance is increased a pound at a time as tolerated with emphasis on high reps and frequency
- When patient can move through a full and pain free flexion arc with 8-10 lbs. at high reps, he/she can then transition to machine hamstring curls
- Quarter squats and heel raises progress from bilateral to unilateral status
- Step down exercises using progressively higher steps
- Gluteus maximus strength exercises progress from prone to supine
- Gluteus medius strengthening is started in side lying position and is progressed to the upright position
- Begin unilateral knee extension and leg press activities with light resistance and increase as the operative leg tolerates (starting hip position should be below 90 degrees and pain free)
- Though flexibility exercises are contraindicated at this point, those complaining of tightness may do gentle single knee to chest stretch on involved side

#### Phase III (Weeks 8-16)

- Return to unrestricted ADL's at home and work
- Continued hamstring strengthening which can advance from machines to exercises combining strength and balance
- Pain free performance of nonimpact aerobic activities
- Encourage gradual progression to 30-minute nonimpact aerobic exercise 3-5 times per week (if cycling cannot be tolerated, aquatic therapy recommended)

#### **Phase IV (Weeks 16-24)**

- Advanced proprioceptive training is carried out as patient masters previous goals
- Strengthening continues
- Closed kinetic chain hamstring exercises i.e., advanced step downs, double to single leg Swiss ball curls, resisted incline hip extensions, roman dead-lifts, half to full squat progression
- Low level plyometrics i.e., jump rope, step lunges in multiple directions with progression to walking lunges
- Light jogging when permitted by physician
- At 6 months, single leg hop for distance and (optional) Cybex isokinetic tests (180°/s and 60°/s)
- Return to sport specific activities once involved hamstring strength is 75°/s versus the noninvolved leg at 60°/s with clearance from physician
- Sport specific training