

Edward S. Chang, MDOrthopaedics and
Sports Medicine

OFFICE LOCATIONS

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CLINICAL NURSE

Eileen Perri, BSN (703) 797-6918

REHABILITATION GUIDELINES

PROXIMAL HAMSTRING REPAIR

The rehabilitation guidelines are presented in a criterion based progression program. General time frames are given for reference to the average, but individual patients will progress at different rates depending on their age, associated injuries, pre-injury health status, rehab compliance, tissue quality and injury severity. Specific time frames, restrictions and precautions may also be given to protect healing tissues and the surgical repair/reconstruction.

INDIVIDUAL CONSIDERATIONS:

PHASE I (Weeks 2-4)

Goals

Protect surgical repair

Precautions

- 1. NWB for first 4 weeks (Toe touch permitted for balance)
- 2. Hip Brace locked at 20 degrees- may be removed for therapy
- 3. Discontinue brace approximately 4 weeks after surgery depending on repair strength but keep using crutches for stability

Range of Motion

No hip flexion greater than 30 degrees.

Therapeutic

- 1. Ankle Pumps
- 2. Isometric Quad Sets
- 3. Light desensitization

PHASE II (Weeks 4-8)

Goals

- 1. Wean from brace
- 2. Improve Gait

Weight Bearing Status

1. Progressive WBAT Starting at week 4 (25%, 50%, 75%, 100%)



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Therapeutic

- 1. Brace is discontinued after one month post-op appointment with Dr. Chang and begin to wean from crutches
- 2. 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
- 3. 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
- 4. Quarter squats and heel raises progress from bilateral to unilateral status
- 5. Step down exercises using progressively higher steps
- 6. Gluteus maximus strength exercises progress from prone to supine
- 7. 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)

Goals

Return to unrestricted ADL's at home and work

Therapeutic

- 1. Continued hamstring strengthening which can advance from machines to exercises combining strength and balance
- 2. Pain free performance of nonimpact aerobic activities
- 3. 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)

Goals

Gradual return back to activity/sport

Therapeutic

- 1. Advanced proprioceptive training is carried out as patient masters previous goals
- 2. 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
- 3. Low level plyometrics i.e., jump rope, step lunges in multiple directions with progression to walking lunges
- 4. Light jogging when permitted by physician
- 5. At 6 months, single leg hop for distance and (optional) Cybex isokinetic tests $(180^{\circ}/\text{s} \text{ and } 60^{\circ}/\text{s})$

Return to sport specific activities once involved hamstring strength is 75° /s versus the noninvolved leg at 60° /s with clearance from physician.