



Orthopaedic Surgery - Arthroscopic Surgery - Joint Replacement - Sports Medicine - Fracture Care

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Proximal Hamstring Repair Rehabilitation

Phase I: 0 to 4 Weeks

Clinical Goals:

- ♦ Protective Phase

Testing:

- ♦ None

Exercises:

- ♦ Cryotherapy for pain and swelling control 3-5x/day
- ♦ Hip brace
- ♦ Teach patient how to transfer from supine to sit, stand to sit, as well as perform ADLs *safely*.
(Avoid greater than 60 degrees of hip flexion with the knee extended during any and all activities, ie. sitting.)
- ♦ Heel props with quad sets in (supine position only) to avoid knee stiffness and quad shut down.

Week 1-2 Ex's

Ankle Pumps, Gluteus squeezes, Quad squeezes, Transverse abdominals, gentle Hip Abdsbmax isometrics using a belt or Pilates ring, lumbopelvic stabilization, patellarmobilizations

At 2 weeks: ankle strengthening, passive calf stretching with 0° hipflexion

Week 3-4 Ex's

Progress PROM 0-45 at the hip

Initiate AROM at week 4, but no hamstring contraction

At 4 weeks:prone quad strengthening, sidelying hip abd/add, single and double-limbbalance and proprioception, lumbopelvic stabilization (PRE's)

Clinical Follow-up:

♦ Follow-up with the therapist for continued edema control and gradual increase in activitiesat approximately 4 weeks post-op.

Phase II: 4 to 6 Weeks

Clinical Goals:

- ♦ Discontinue brace
- ♦ Restore normal gait
- ♦ Pain free and normal functional ADLs

Testing:

- ♦ Monitor hamstring flexibility and tenderness of surgery site

Exercises:

- ♦ Restore normal gait pattern (emphasize good leg control with extension of the knee during the swing phase and heel strike)
- ♦ Improve ADL function, i.e. sit --- stand, stairs, etc
- ♦ Begin light hamstring strengthening with low loads, high reps and high frequency by performing hamstring leg curls in standing with the hip extended. Start with zero resistance then progress as tolerated 1 pound at a time - 2x20, 4-5x/day
- ♦ Begin Total Leg Strengthening (TLS):
 - oHeel raises
 - oQuad sets (active heel lift)
 - oShort arc quads
 - oGeneral hip strengthening in side lying (gluteus maximus and medius progressions as well as adductors)
 - oSingle leg balance for proprioception
- ♦ No hamstring flexibility or stretching exercises are to be performed during this phase. Lengthening of the repair and return of normal hamstring flexibility will be allowed to occur on its own. (This is traditionally not a problem following this procedure.)
- ♦ Light desensitization massage to the incision may help alleviate discomfort during this phase. Some patients may also benefit from an extra seat cushion while sitting.

Week 5-6 Ex's

Progress PROM at the hip 0-90*
Discontinue brace after 6 weeks
progress to FWB

Isometric exercises

At 6 weeks: stationary bike, when obtained 90° hip flexion, supine SLR's

Clinical Follow-up:

♦ Follow-up with the physician at approximately 6 weeks post-op to discontinue brace and begin rehab for restoring normal function with ADLs.

Phase III: 6 to 12 weeks

Clinical Goals

- ♦ Pain-free performance of non-impact aerobic activities
- ♦ Unrestricted ADLs at home and work

Testing

- ♦ Monitor hamstring flexibility and tenderness of surgery site

Exercises

♦ Begin non-impact aerobic conditioning as tolerated with any of the following;

- Stationary bike
- Stairmaster
- Elliptical trainer
- Aquatic therapy with swimming and/or functional activities in the water (Avoid forceful, explosive or repetitively strainful activities, ie; starts, turns, breast stroke, etc.)

Continue to progress TLS as tolerated;

- ¼ squats
- Step downs
- Leg press
- Knee extensions
- Heel raises
- Hip abductor strengthening in standing with tubing or machine
- Balance and proprioceptive training

♦ Progress hamstring strengthening in standing by increasing weight or initiating the tubing

♦ Patient may progress to the prone position on a machine and then to seated leg curls (with the hip flexed at 90 degrees) with tubing as tolerated.

Clinical Follow-up:

♦ The patient will follow up with the physician at 12 weeks post-op. The patient's frequency of follow up with the therapist will be determined on an individual basis and depend largely on the patient's compliance, as well as, the patient's and therapists comfort level with the progress of the rehab program.

Phase IV: 3 to 6 Months

Clinical Goals:

♦ Successful completion of a functional progression for patient's return to work or leisure sports

Testing:

♦ Monitor hamstring flexibility

♦ Isometric leg press and Cybex isokinetic testing at the end of this phase

Exercises:

♦ Restore normal hamstring flexibility, *if necessary*

♦ Continue balance and proprioception retraining

♦ Progress TLS program to include:

- Advanced step down progression
- $\frac{1}{4}$ - $\frac{1}{2}$ squats with hand held weights
- Straight leg raises with ankle weights or theratubing
- Advanced weight room exercises (Including closed kinetic chain hamstring strengthening)

♦ Patient may begin a light jogging progression at approximately 5-6 months

♦ Patient may begin a progression back to *competitive* activities once strength is over 75% (Compared to noninvolved side)

♦ Some patients may find a compressive thigh sleeve to be beneficial for these activities

Clinical Follow-up:

♦ The patient will follow up with the physician between 6 months post-op. Patient will follow up with therapy as needed during this time to ensure goals are being met. A strength evaluation will be performed on the Cybex and Isometric leg press at 6, 9, and 12 months post-op.