

Dr. Henry

Proximal Hamstring Tendon Repair

Phase 1- Early Protective Phase (0-6 weeks)

Goals for phase 1

Precautions

gravity

- Protect surgical repair
- Control Pain
- Control Swelling

Brace (knee or hip, case dependent)

- Knee brace locked at 60 degrees of flexion (surgeon decision) (Weeks 0-6)
- 0-6)
- Hip brace set 0-90 degrees (0-6 weeks)

Weight bearing

• Toe touch weight bearing (max 25 lbs) with use of crutches (Weeks 0-

6) **PROM**

• May initiate hip PROM at Week 2

$_{\odot}$ Limit hip flexion to <90 degrees

Manual Therapy

- Light desensitization massage around incision and posterior hip region
- Soft tissue mobilization

Strengthening

- Ankle pumps
- Quad sets in knee flexed position
- Abdominal isometrics
- Glute sets

Modalities

• Ice 4-6x per day for 20 minutes per session

Phase 2 - Intermediate Phase (6-8 weeks)

Goals for phase 2

- Protect surgical repair
- Restore normal gait
- Return to pain-free functional ADLs

• Toe touch weight bearing for 6 weeks

Avoid active hamstring contraction

Avoid hip flexion >90 degrees

No active knee flexion against

Knee extension limited pending

intra-operative tension on repair

Precautions

- Monitor tenderness at the surgery site
- No hamstring stretching exercises
- No impact or running

Brace

• Discontinue hip brace at 6 weeks post op

Weight bearing

• After 6 weeks, progress back to FWB over 2 weeks beginning with 25% weight bearing and increasing 25% ever 3-4 days if the patient has controlled pain and appropriate knee control/quadricep activation

ROM

- Continue with hip and knee flexion PROM
- Hip and knee AROM
- Limit hip flexion to 105 degrees with knee flexed at 90 degrees

Manual Therapy

- Scar mobilization
- Soft tissue mobilizations
- Grade 1-2 hip mobilizations



Strengthening

- Side lying hip abduction
- Standing calf raises
- Mini squats
- Heel slides
- Short arc quads
- Clam shells
- Core strengthening
- May initiate sub-max isometrics of hamstrings starting at 6 weeks postoperative in supine

Proprioception

• Double let balance and proprioceptive training

Aquatics

- May initiate when incision is healed
- No resisted hamstring exercises

Ice

• 2-3x per day for 20 minutes per session

Phase 3 – Intermediate Phase (8-16 weeks)

Goals for phase 3

- Return to unrestricted ADLs at home and work
- Progressive hamstring loading
- Improve LE strength

Precautions

- No pain during strength training
- Do not overload with repaired tendon

Restore gait mechanics

ROM

• Continue to gradually progress hip and knee range of motion as tolerated within pain-free range

Manual Therapy

Weight bearing

- Scar mobilization
- Soft tissue mobilizations
- Grade 1-4 hip mobilizations as needed

Strengthening

- Stationary biking
 - Straight leg raise
 - Lunges
 - Step-ups and step-downs
 - Double leg bridge
 - Low load isotonic hamstring activation exercises in shorted hamstring position, gradually progressing to more lengthened hamstring position
 - After 12 weeks, may initiate more single leg loading exercises (i.e. single leg squats, single leg RDL, single leg bridge, etc.)

Proprioception

• Single leg balance and proprioceptive training

Ice

• 2x per day for 20 minutes per session



Phase 4 - Return To Sport/Full Activity (16+ weeks)

Goals for phase 4

- Progress muscle strength, endurance, and balance
- Progress with multi-directional movements
- Progress with impact activities

Proprioception

- Advanced proprioceptive training with unstable surfaces with perturbations and/or dual tasks
- Sport specific balance tasks

Strengthening

- Gradually progress load of exercises
- Progress with power and speed of exercises
- Nordic Curls
- Single-leg swiss ball bridge to hamstring curls

Strengthening

- Gradually progress load of exercises
- Progress with power and speed of exercises
- Nordic Curls
- Single-leg swiss ball bridge to hamstring curls

Criteria for return to work, function, sport

- No sprinting until 24 weeks post-op
- Agility
 - May begin double leg impact when strength is <20% deficit between LE with quadricep and hamstring assessment
 - Double to single leg impact
 - Gradual increase in vertical jump height

Gait Training/Running

- May begin once Y-balance is <6 cm difference with posterior reaches and <4 cm difference with anterior reach
- Walk to jog progression
- Week 20: Initiate multi-directional running and cutting drills

Modalities

• Utilize ice as needed

Return to sport

- Physician clearance
- Isokinetic testing >90% LSI
- Hamstring strength >50% BW
- Functional Hop Testing >90% LSI
- No increase in symptoms with sport specific progressions and testing

Updated 8/29/2024 JH, SH and BD