



ORTHOPEDICS & SPORTS MEDICINE BAYCARE CLINIC®

Dr. Schock

Proximal Hamstring Tendon Repair

Phase 1- Early Protective Phase (0-4 weeks)

Goals for phase 1

- Protect surgical repair
- Control Pain
- Control Swelling

Precautions

- Non-weight bearing for 2 weeks
- Avoid active hamstring contraction
- No active knee flexion against gravity
- Knee extension limited pending intra-operative tension on repair

Brace

- Knee brace locked at 60 degrees of flexion (Weeks 0-2)
- Knee brace locked at 40 degrees of flexion (Weeks 2-4)

Weight bearing

- Non-weight bearing with use of crutches or knee scooter (Weeks 0-2)
- Toe touch weight bearing with use of crutches or walker (Weeks 2-4)

PROM

- May initiate hip PROM at Week 2 with knee flexed at 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 (4-8 weeks)

Goals for phase 2

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

Precautions

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

Brace

- Knee brace locked at 10 degrees of flexion (Weeks 4-6)
- Knee brace opened at 6 weeks post-operative

Weight bearing

- Partial weight bearing 50% with use of crutches or walker (Weeks 4-6)
- After 6 weeks, progress back to FWB with 75% weight bearing for 3-4 days and then can progress to full weight bearing if the patient has controlled pain and appropriate knee control/quadriceps activation

ROM

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

Manual Therapy

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

Aquatics

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

Ice

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



Phase 2 – Intermediate Phase (4-8 weeks) Cont.

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 post-operative in supine

Proprioception

- Double let balance and proprioceptive training

Phase 3 – Intermediate Phase (8-16 weeks)

Brace

- May discontinue use of brace at 8 weeks

Weight bearing

- WBAT without assistive device

ROM

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

Manual Therapy

- 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

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



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

Criteria for return to work, function, sport

- No sprinting until 24 weeks post-op

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

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- Progress with power and speed of exercises
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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