



DR. JOHN AWOWALE
PROXIMAL HAMSTRING TENDON REPAIR POST-OP THERAPY PROTOCOL

Phase 1 – Early Protective Phase (0-2 weeks)

Goals for Phase 1	Precautions for Phase 1
<ul style="list-style-type: none">• Protect surgical repair• Control pain• Control swelling	<ul style="list-style-type: none">• Toe touch weight bearing• Avoid active hamstring contraction• Avoid hip flexion >60°• Knee brace locked at 30° to avoid full knee extension• No active knee flexion against gravity• Knee extension limited pending intra-operative tension on repair

Weight Bearing

- **0-2 weeks:** Toe touch weight bearing with crutches

Brace

- **0-2 weeks:** Knee brace locked with extension block at 30°
- May passively flex knee as tolerated with block in place

Passive Range of Motion

- May initiate hip PROM with knee flexed at 90°
 - Limit hip flexion to <60°
- Avoid combined knee flexion and hip extension

Manual Therapy

- Light desensitization massage around incision and posterior hip region
- Grade 1-2 hip mobilization for pain modulation including log rolling with knee flexed
- Soft tissue mobilization

Strengthening

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

Modalities

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



DR. JOHN AWOWALE
PROXIMAL HAMSTRING TENDON REPAIR POST-OP THERAPY PROTOCOL

Phase 2 – Intermediate Phase (2-6 weeks)

Goals for Phase 2	Precautions for Phase 2
<ul style="list-style-type: none">• Protect surgical repair• Normal gait pattern• Return to pain-free functional ADLs	<ul style="list-style-type: none">• Monitor tenderness at the surgery site• No hamstring stretching exercises• Limit hip flexion to less than 90°• No impact or running

Weight Bearing

- Partial weight bearing 50% with use of crutches or walker
- Brace to be worn while ambulating

Brace

- Knee brace locked at 30° of flexion (avoid knee extension) during ambulation.
- May unlock for range of motion

Range of Motion

- Continue with hip and knee flexion PROM
 - Limit hip flexion to 90° with knee flexed at 90°
- Prone passive knee ROM with hip extended – begin gradual progression of knee extension toward 0° (do not force)

Manual Therapy

- Scar mobilization
- Soft tissue mobilizations
- Grade 1-2 hip mobilizations for pain modulation including log rolling with knee flexed

Strengthening

- Bilateral strengthening program including standing calf raises, mini squats, side stepping, step ups
- Hip and quad strengthening: side-lying active assisted hip abduction, clamshells, limited range short arc quad and long arc quad (avoid end range extension)
- Core strengthening
- May initiate sub-max isometrics of hamstrings starting at 6 weeks post-operative in supine

Proprioception

- Double leg balance and proprioceptive training

Aquatics

- May initiate when incision is healed with focus on core strength, normalizing gait, and mobility
 - No resisted hamstring exercises during this phase

Modalities

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



DR. JOHN AWOWALE
PROXIMAL HAMSTRING TENDON REPAIR POST-OP THERAPY PROTOCOL

Phase 3 – Intermediate Phase (6-12 weeks)

Goals for Phase 3	Precautions for Phase 3
<ul style="list-style-type: none">• Return to unrestricted ADLs at home• Progressive work-based activities• Progressive hamstring loading• Improve lower extremity strength	<ul style="list-style-type: none">• No pain during strength training• Do not overload with repaired tendon

Weight Bearing

- Wean from crutches gradually over two-week period starting at 6 weeks

Brace

- May begin to wean from brace

Range of Motion

- Continue to gradually progress hip and knee range of motion within pain-free range
- No restrictions on the range of motion

Manual Therapy

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

Strengthening

- Initiate upright stationary bike
- Bilateral strengthening program including standing calf raises, mini squats, side stepping, double leg bridges, step ups
- Hip and quad strengthening: side-lying hip abduction, clamshells, straight leg raise, short arc quadriceps, long arc quadriceps, etc.
- Core strengthening
- Partial lunge
- Step-ups and step-downs
- Initiate hamstring isometric and gradually progress toward 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

Modalities

- Ice 2x/day for 20 minutes per session



DR. JOHN AWOWALE
PROXIMAL HAMSTRING TENDON REPAIR POST-OP THERAPY PROTOCOL

Phase 4 – Return to Activity Phase (12+ weeks)

Goals for Phase 4	Precautions for Phase 4
<ul style="list-style-type: none">• Progress muscle strength, endurance, and balance• Progress with multi-directional movements• Progress with impact activities	<ul style="list-style-type: none">• 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 exercises
- Nordic curls
- Single leg Swiss ball bridge to hamstring curls

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

- Begin progression of walk distance and speed
- Begin walk jog program at 16 weeks if strength is less than 20% LSI.
- 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