

PROXIMAL HAMSTRING REPAIR

Physical Therapy, Strength and Conditioning

PHASE I: MAXIMUM PROTECTION (WEEKS 0 TO 6)

- 50% Partial Weight Bearing x 4 weeks
- WBAT weeks 4-6
- Breg T Scope Hip brace—30° EXT - 70° FLEX for 6 weeks when not working with physical therapy.
- Discontinue brace during sleep after first post-operative brace at 2 weeks.
- **Goals**
 - Protect Repaired tissue
 - Control Pain & Inflammation with Modalities
 - Restore ROM per MD guidelines
- **Exercise progression**
 - Quad Sets, Abdominal Isometrics, Transverse Abdominus Activation, Glut Sets, Ankle Pumps from POD #1
 - Passive Hip and Knee ROM, so hip flexion is equal to knee flexion (ie 90 degree hip flexion only done when knee in 90 degree flexion)
 - Do not push into pain or stretch
 - **Weeks 0-2:**
 - Hip flexion 0-70
 - Ankle Strengthening
 - Supine calf stretching (hip @ 0)
 - ABD isometrics in supine
 - **Weeks 2-6:**
 - Hip flexion 0-90
 - Prone quad stretch
 - SLR ABD
 - Balance/Proprioception as WBing status indicates
 - Stationary Bike (with elevated seat height) without resistance as tolerated

Criteria for Progression to Phase 2:

- ROM slowly progressing
- Limited edema
- Early restoration of neuromuscular control

PHASE II: PROGRESSIVE STRETCHING AND EARLY STRENGTHENING (WEEKS 6 TO 12)

Goals:

- Wean off crutches at 4 weeks.
- Normal gait (goal by 6 weeks or earlier if possible)
- Discontinue brace
- Normal single limb stance
- Improving ROM
- Focus on patient having good understanding of glute activation and deep core activation

- Begin very basic LE strength and endurance work

Manual Therapy:

- Scar mobilization: 2 times per day: May use Vit E or other lotion as desired
- STM to quad, ITB, hip flexors, glutes, hip adductors/abductors/rotators
- Continue work on ROM as tolerated (flexion, abduction, IR, ER)

Exercise Progression (as tolerated):

- Gait training – normalize
- Bilateral squat progression (mini squats with very gradual progression in depth)
- Multi-plane open and closed kinetic chain hip strengthening
- Step-up progression
- Stationary biking and treadmill/outdoor walking, elliptical as tolerated
- Proprioception drills
- Leg press
- Progress Hip and Core strength
- Gentle hamstring isometrics at 10 weeks
- Deep water pool program when incisions are completely healed

Criteria for Progression to Phase 3:

- *Normal gait pattern*
- *Pain free and appropriate neuromuscular patterns and control*

PHASE III: ADVANCED STRENGTHENING AND ENDURANCE TRAINING (WEEKS 12 TO 16)

Goals:

- Hip and quad strength 5/5 MMT
- Develop Hamstring strength 4+/5
- Initiate isotonic hamstring strengthening
- Pain free strengthening
- Manual Therapy

Exercise Progression

- Squat progression adding weight and depth as tolerated
- Isolated hamstrings strengthening (DL bridges, hip extension)
- Lunge progression (retro, walk and split) as tolerated (gradual increase in ROM)
- Hamstring curls
- Single leg squats
- Outdoor biking as tolerated
- Swimming free style
- Backward elevated treadmill walking
- Hold Impact activity/Jogging until 4 months post operatively

Criteria for Progression to Phase 4:

- *Hip and quad strength 5/5 MMT*
- *Hamstring strength 4+/5*
- *Patient must demonstrate good single leg squat mechanics and proficiency with ladder/agility drills prior to initiating running program*

PHASE IV: RETURN TO RUNNING/RETURN TO SPORT PROGRAM (WEEKS 16-24)

Goals

- 90% outcome on return to sport testing
- 5/5 Hamstring MMT
- Initiate jogging

- Develop individualized strength program based on patient goals
- Return to sports **See Specific Steadman Hawkins Return to Sports Protocols based upon the patient's individualized goals**
- NO Dead Lifts x 6 months p/o

Exercise Progression

- Initiate jogging @ 4 months p/o
- Progress resistance with squat and lunge strengthening program
- Multi-directional agility drills
- Pool running gradually progressing to land based as tolerated
- Basic plyometric box progression

Return to Sport and Functional Drills (begin at 4-5 months)

- Sport specific field/court drills

Sports test and follow-up with physician (5-6 months)

- Follow-up examination with the physician
- Sports test for return to competition