Southeast Kansas Orthopedic Clinic

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Proximal Hamstring Repair

Phase I - Maximum Protection

Weeks 0-4

- Brace- wear at all times for 6 weeks
  - 40 degree knee flexion lock unless directed by MD
- Toe touch weight bearing (TTWB) for 4 weeks

  Goals
  - Reduce inflammation and pain
  - Protect surgical repair

  Exercise progression
  - Initiate passive range of motion at 2 weeks
  - Quad and glute isometric activation
  - Patellofemoral mobilizations
  - Open chain hip strengthening
  - Gait training

Weeks 4 to 6:

- Brace- wear at all times for 6 weeks
- Progress to weight bearing as tolerated (WBAT)
- Initiate active and active-assisted range of motion

  Goals
  - Reduce inflammation and pain
  - Protect surgical repair
  - Progress weight bearing on limb during gait

  Exercise progression
  - PROM/AROM/AAROM in painfree range of motion
  - Initiate weight shifts at 4 weeks to progress weight bearing status and facilitate muscle activation
  - Initiate local core stabilization exercises
    - No bridging until 10 weeks

Phase II- Progressive Stretching and Early Strengthening

Weeks 6 to 8:

- Discontinue brace
- Progress ROM as tolerated
- Initiate closed chain strengthening

  Goals
  - Full knee extension/hyperextension by 8 weeks
  - Painfree knee flexion AROM by 8 weeks
  - No swelling
  - Normal gait pattern

  Exercise progression
  - Initiate hamstring isometric activation
  - Initiate bike at 6 weeks
  - Normalize gait pattern
  - Closed chain double leg strengthening
    - Hold on bridging until 10 weeks

Phase III- Progressive Strengthening
Weeks 8 to 12:

- Initiate balance/proprioceptive drills
- Progress to unilateral closed chain exercises

  Goals
  - Full knee range of motion
  - Protect repair
  - Normal gait pattern
  - Progress limb strength

  Exercise progression
  - Initiate end range stretching
  - Initiate elliptical trainer at 8 weeks
  - Progress closed kinetic chain strengthening from double limb to single limb
  - Proprioception drills
  - Initiate double limb bridging at 10 weeks
  - Step-up progression

Phase IV- Advanced Strengthening and Endurance Training
Weeks 12 to 16:

- Advance strengthening program
- Prepare for Preliminary functional test to perform at 16 weeks
- Progress balance and proprioception

  Goals
  - Full range of motion
  - Protect repair
  - Normal gait pattern
  - Increase single leg strength

  Exercise progression
  - Single limb closed chain exercises
  - Eccentric loading
  - Proprioception drills

Phase V- Running Progression and Plyometric Progression
Weeks 16 to 20:

- Administer Preliminary functional test at 16 weeks for physician to review
- Initiate straight line jogging at 16 weeks if proper biomechanics are demonstrated
- Initiate plyometric training progressing from double limb to single limb
- Advance strengthening program

  Goals
  - No swelling
  - Full range of motion
  - Symmetrical strength and power

  Exercise progression
  - Basic ladder series
  - Linear jogging progression
  - Plyometric progression

Phase V- Return to Sport
Weeks 20 to 24:

- Progress plyometric training to multi-direction, change of direction, and deceleration

- Administer Return To Sport functional test prior to 6 month follow up appointment with MD

  Goals
  - No swelling
  - Full range of motion
  - Symmetrical strength and power

  Exercise progression
  - Advance ladder, hurdle, and plyometrics
  - Sport specific field/court drills
  - Non-contact drills

Criteria to be released for return to sport
- Follow-up examination with the physician
- Pass Return To Sport functional test at >90% (involved vs. uninvolved limb)
- Display symmetry and confidence in high-speed cutting, multi-plane plyometric drills, sprinting and decelerating

Anticipated return to sport:
- 5-6 months for contact and non-contact athletes