

Appendix A

Routine Arthroscopic Procedure

(Loose body removal, labral debridement, chondroplasty, synovectomy, ligamentum teres debridement)

- Weight bearing as tolerated → use crutches to normalize gait
 - Crutches are usually discontinued at 5-7 days, once gait is normalized
- Initiate supervised physical therapy, postoperative day 1 or 2.
- Initiate stationary bike as symptoms allow.
 - Seat raised to avoid uncomfortable hip flexion. (No recumbent bicycle)
 - Low resistance with the emphasis on fluid ROM.
- Pool program initiated when sutures removed and portals healed (approximately 10 days; sutures removed at 1 week).
- Rehab should be deliberate for the first 2-3 months, then initiate functional progression as symptoms allow (2 versus 3 months dictated by nature of pathology).
 - 2 months: loose fragment, simple labral tears, ruptured ligamentum teres.
 - 3 months: tenuous preserved labrum (i.e. thermal treatment for stabilization); or extensive articular damage.

****This is a guideline for progression. It needs to be tailored to the individual. It is a “one size fits all” progression and may need to be adjusted to best fit the patient.***

Phase I: Initial Exercise (Weeks 1-3)

- Week 1
 - Ankle Pumps
 - Gluteals, quadriceps, hamstring, adduction isometrics
 - Heel slides, active-assisted range of motion
 - Quadraped rocking
 - Pelvic tilt, trunk rotation, modified dead bug
 - Seated knee extension
 - Prone positioning – POE, prone knee flexion
 - Standing abduction, adduction, extension, flexion without resistance
 - Standard stationary bike without resistance at 3 days post-op (10min.if tolerated)
 - Upper body ergometer, upper body strengthening
 - Pain dominant hip mobilization- grades I,II
- Week 2 (in addition to above)
 - Double leg bridging
 - Abduction isometrics
 - Weight shifts- standing, sitting supported, anterior/posterior, laterals, physioball
 - ¼ Mini squats, standing heel lifts, wall mini-squats, physioball mini-squats with co-contraction
 - Hip flexion, IR/ER in pain-free range
 - 4 way theraband resistance on affected side (start very low resistance)
 - Ankle PNF
 - Pool water walking, ROM, march steps, lateral steps, backward walking, mini-squats, heel raises, hamstring and hip flexor stretches
- Week 3
 - Continue stationary bike with minimal resistance- 5min. increase daily
 - Active range of motion with gradual end range stretch within tolerance
 - Stiffness dominant hip mobilization-grades III,IV
 - Double leg bridges to single leg bridges
 - Clamshells (pain-free range)
 - 3 way leg raises- abduction, adduction, extension
 - Single leg sports cord leg press (long sitting) limiting hip flexion
 - Shuttle leg press 90 degree hip flexion with co-contraction of adductors

- Quadraped 4 point support, progress 3 point support, progress 2 point
- Seated physioball progression-active hip/knee
- Forward and lateral walking over cups and hurdles (pause on effected limb), add ball toss while walking

Goals

- Restore pain free ROM
- Diminish pain and inflammation
- Prevent muscular inhibition
- Normalize gait

Criteria for progression to Phase II

- Minimal pain with phase I exercises
- Minimal range of motion limitations
- Normalized gait without crutches

Phase II: Intermediate exercises (Weeks 4-6)

- Weeks 4 and 5
 - Gradually increase resistance with stationary bike
 - Initiate elliptical machine
 - Core stabilization training
 - Unstable surface squats
 - Standing theraband/pulley weight flexion, adduction, abduction, extension, multi-hip machine
 - Single leg balance- firm to soft surface
 - Clamshells with theraband
 - Sidestepping with resistance (pause on effected limb), sports cord walking forward and backward (pause on effected limb)
 - Pool water exercise.- flutter kick swimming, 4way hip with water weights, step-ups
- Week 6
 - Single leg balance-firm to soft surface with external perturbation (ball catch, sports specific/simulated ex.)
 - Leg Press (gradually increasing weight)
 - Physioball hamstring ex.- hip lift, bent knee hip lift, curls, balance
 - Superman on physioball- 2point on physioball
 - Knee extensions, hamstring curls
 - Manual/Theraband PNF

Goals

- Restore pain-free range of motion
- Initiate proprioception exercises
- Progressively increase muscle strength and endurance

Criteria for progression to Phase III

- Minimum pain with phase II exercises
- Single leg stance with level pelvis

Phase III: Advanced exercises

- Weeks 7-8
 - Full squats
 - Single stability ball bridges
 - Step-ups with eccentric lowering
 - Lunges progress from single plane to tri-planar lunges, add med balls for resistance and rotation
 - Theraband walking patterns-forward, side stepping, carioca, monster steps, backward, ½ circles forward/backward- 25yds. Start band at knee height and progress to ankle height
 - Side steps over cups/hurdles (with ball toss and external sports cord resistance), increase speed
 - Single leg body weight squats, increase external resistance, stand on soft surface

Goals

- Restoration of muscular endurance/strength
- Restoration of cardiovascular endurance
- Optimize neuromuscular control/balance/proprioception

Criteria for Progression to Phase IV

- Single leg mini-squat with level pelvis
- Cardiovascular fitness equal to pre-injury level
- Demonstration of initial agility drills with proper body mechanics

Phase IV: Sports specific training rehab clinic based progression

- Weeks 9-11
 - All phase III exercises
 - Single leg pick ups, add soft surface
 - Pool running (progress from chest deep to waist deep), treadmill jogging
 - Step drills, quick feet step ups (4-6 inch box) forward, lateral, carioca
 - Plyometrics, double leg and single leg shuttle jumps
 - Theraband walking patterns 1rep of six exercises x 50yds, progress to band at knee height and ankle height

Sports specific training on field or court

- Weeks 12 and on
 - Running progression
 - Sport specific drills
 - Traditional weight training

Criteria for full return to competition:

- Full range of motion
- Hip strength equal to uninvolved side, single leg pick up with level pelvis
- Ability to perform sport-specific drills at full speed without pain
- Completion of functional sports test