### Routine Arthroscopic Procedure

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

This protocol should be used as a guideline for progression and should be tailored to the needs of the individual patient.

- 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, postop day 1 or 2.
- Isometrics, co-contractions, closed chain exercises.
- Initiate stationary bike as symptoms allow.
  - Seat raised to avoid uncomfortable hip flexion.
  - \* Low resistance with the emphasis on fluid range of motion.
- Pool program initiated when sutures removed and portals healed.

(approximately 10 days; sutures removed at 1 week)

- Rehab deliberate for the first 2-3 months, then initiate functional progression as symptoms allow.
  - (2 vs. 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.

#### • "Honeymoon period"

- At 1 month most patients feel like they are doing better than they really are (regardless of eventual outcome).
- Probably due to expectations of surgery being more disabling.
- Risk of overdoing it!
- Delaying functional progression based on tolerance to 2-3 months more reliable with less risk of setback.
- \* Functional progression more liberal for athletes with close supervision.

## Initial Exercises (Weeks 1-3)



Seated weight shifts, lateral



Glut sets



Seated knee extensions



Quad sets



Ankle pumps



Hamstring sets

# Initial Exercises (Weeks 1-3)



Adductor isometrics



Pelvic tilt



Heel slides, active-assisted range of motion



Trunk rotation



Log rolling



Double leg bridges

# Initial Exercises (Weeks 1-3)



Prone on elbows



Standing adduction without resistance



Prone knee flexion



Standing extension without resistance



Standing abduction without resistance



Standing flexion without resistance

## Initial Exercises (Weeks 1-3)



Pain dominant hip mobilization – grades I, II

### Other Exercises Week 1

- Standard stationary bike without resistance at 3 days post-op (10 min. if tolerated)
- Upper body ergometer, upper body strengthening

## PHASE 1: WEEK 2

## In Addition to Previous Exercises (Weeks 1-3)



Abduction isometrics



1/4 Mini squats



Weight shifts – anterior/posterior



Standing heel lifts

## In Addition to Previous Exercises (Weeks 1-3)



Hip flexion, IR/ER in pain-free range



Theraband resistance on affected side – Flexion (start very low resistance)



Theraband resistance on affected side – Abduction (start very low resistance)



Theraband resistance on affected side – Extension (start very low resistance)



Theraband resistance on affected side – Adduction (start very low resistance)



Superman

## In Addition to Previous Exercises (Weeks 1-3)

### Other Exercises Week 2

- Wall mini-squats
- Physioball mini-squats with cocontraction
- Pool exercises (water walking, range of motion, march steps, lateral steps, backward walking, mini-squats, heel raises, hamstring and hip flexor stretches)

### PHASE 1: WEEK 3

## In Addition to Previous Exercises (Weeks 1-3)





Stiffness dominant hip mobilization – grades III,  ${\it IV}$ 



Double leg bridges to single leg bridges



Clamshells (pain-free range)

## In Addition to Previous Exercises (Weeks 1-3)



Leg raise - Abduction



Dead bug



Leg raise – Extension



Quadriped 4 point support, progress 3 point support, progress 2 point



Shuttle leg press 90 degree hip flexion with cocontraction of adductors



Seated physioball progression – hip flexion

## In Addition to Previous Exercises (Weeks 1-3)



Forward walking over cups and hurdles (pause on affected limb), add ball toss while walking



Lateral walking over cups and hurdles (pause on affected limb), add ball toss while walking

### Other Exercises Week 3

- Continue stationary bike with minimal resistance 5 min. increase daily
- Active range of motion with gradual end range stretch within tolerance
- Leg raise Adduction
- Single leg sports cord leg press (long sitting) limiting hip flexion

#### Goals of Phase 1

- ☐ Restore range of motion
- ☐ Diminish pain and inflammation
- ☐ Prevent muscular inhibition
- ☐ Normalize gait

### Criteria for progression to Phase 2

- ☐ Minimal pain with phase 1 exercises
- ☐ Minimal range of motion limitations
- ☐ Normalized gait without crutches

PHASE 2: WEEKS 4-5

# Intermediate Exercises (Weeks 4-6)



Crunches



Standing theraband/pulley weight – Adduction



Bosu squats



Standing theraband/pulley weight – Flexion



Standing theraband/pulley weight – Abduction



Standing theraband/pulley weight – Extension

PHASE 2: WEEKS 4-5

## Intermediate Exercises (Weeks 4-6)



Single leg balance – firm to soft surface



Sidestepping with resistance (pause on affected limb), sports cord walking forward and backward (pause on affected limb)



Clamshells with theraband

### Other Exercises Weeks 4-5

- Gradually increase resistance with stationary bike
- Initiate elliptical machine
- Pool water exercises flutterkick swimming, 4 way hip with water weights, step-ups

PHASE 2: WEEK 6

## Intermediate Exercises (Week 6)



Leg press (gradually increasing weight)

## Intermediate Exercises (Week 6)





Physioball hamstring exercises – hip lift, bent knee hip lift, curls, balance



Superman on physioball – 2 point on physioball

### Other Exercises Week 6

- Single leg balance firm to soft surface with external perturbation (ball catch, sports specific/simulated ex.)
- Knee extensions, hamstring curls

### Goals of Phase 2

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

### Criteria for progression to Phase 3

- ☐ Minimum pain with phase 2 exercises
- ☐ Single leg stance with level pelvis

PHASE 3: WEEKS 7-8

## Advanced Exercises (Weeks 7-8)



Step-ups with eccentric lowering



Side steps over cups/hurdles (with ball toss and external sports cord resistance), increase speed



Lunges progress from single plane to tri-planar, add medicine balls for resistance and rotation



Single leg body weight squats, increase external resistance, stand on soft surface

Theraband walking patterns – forward, sidestepping, carioca, monster steps, backward, ½ circles forward/backward – 25yds. Start band at knee height and progress to ankle height

#### Other Exercises Weeks 7-8

- Full squats
- Single stability ball bridges

#### Goals for Phase 3

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

PHASE 3: WEEKS 7-8

## Advanced Exercises (Weeks 7-8)

### Criteria for Progression to Phase 4

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

PHASE 4: WEEKS 9-11

## Sports specific training rehab clinic based progression



Single leg pick-ups, add soft surface

#### Other Exercises Weeks 9-11

- All phase 3 exercises
- 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 1 rep of six exercises x 50yds, progress to band at knee height and ankle height

### FINAL PHASE: WEEKS 12 & BEYOND

## Sports specific training rehab clinic based progression

### Other Exercises Weeks 12 & Beyond

- 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