

Total Joint Replacement Arthroscopic Surgery

## **Femoroplasty**

- Toe Touch Weight Bearing for first 4 weeks.
  - o Avoids risk of fracture through area of recontoured head neck junction.
  - Protects against unexpected inordinate torsional or twisting forces, while muscle strength and response are regained.
  - Bony strength mostly unchanged at four weeks, but muscular function can protect the joint.
- Suture removal 7-10 days post-op w/physical therapy or contact the office (804) 379-8088
- Vigorous impact loading avoided for 12 weeks
  - Allows for bone remodeling/healing.
- Aggressive functional progression delayed until 12 weeks.
  - Then progressed to tolerance.
- Resumption of full activities anticipated at 4-6 months.
  - Variable as dictated by hip symptoms.
- Always use pharmacologic prophylaxis against heterotopic ossification (unless contraindicated)
  - Quiz patient
  - o Must initiate and maintain immediately postop.

# \*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 1: Initial Exercise (Weeks 1-3) TTWB

- Week 1
  - Ankle Pumps
  - o Glut, quad, HS, adduction
  - o Heel slides, active-assist range of motion
  - Log rolling
  - o Pelvic tilt, trunk rotation
  - o Double leg bridges
  - Seated heel lifts
  - Seated knee extension
  - o Prone positioning POE, prone knee flexion
  - o Standing abduction, adduction, extension, flexion without resistance
  - o Standard stationary bike without resistance at 3 days post-op (10min.if tolerated)
  - o Upper body ergometer, upper body strengthening
  - o Pain dominant hip mobilization- grades I,II
- Week 2 (in addition to above)
  - o Supine marching, modified dead bug
  - Abduction isometrics
  - o Ankle PNF
  - o Superman
  - o 4 way theraband resistance on affected side (start very low resistance)
  - o Pool water walking, ROM, march steps, lateral steps, backward walking, minisquats, heel raises, hamstring and hip flexor stretches

#### • Week 3

- o Continue stationary bike with minimal resistance- 5min. increase daily
- o Weight shifts- standing, sitting supported, anterior/posterior, laterals, physioball
- ¼ Mini squats, standing heel lifts, wall mini-squats, physioball mini-squats with cocontraction
- o Hip flexion, IR/ER in pain-free range
- o Ankle resistance with dead bug
- Double leg bridges to single leg bridges
- o Clamshells (pain-free range)
- o 3 way leg raises- abd, add, ext
- o Kneeling hip flexor stretch (short of pain)
- O Quadriped 4point support, progress 3point support, progress 2point support
- Seated physioball progression- active hip/knee
- o Active range of motion with gradual end range stretch within tolerance
- o Stiffness dominant hip mobilization-grades III,IV

#### Goals

- Restore ROM
- 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 with one or two crutches

## Phase 2: Intermediate exercises (Weeks 4-6)

- Weeks 4 and 5
  - Wean off of crutches after 4 weeks
  - o Gradually increase resistance with stationary bike
  - Crunches
  - Standing theraband/pulley weight flexion, adduction, abduction, extension, multihip machine
  - o Single leg sports cord leg press (long sitting) limiting hip flexion
  - o Shuttle leg press 90degree hip flexion with cocontraction of adductors
  - o Single leg balance- firm to soft surface
  - o Clamshells with theraband
  - o Pool water ex.- flutterkick swimming, 4way hip with water weights, step-ups
  - o Forward and lateral walking over cups and hurdles (pause on effected limb), add ball toss while walking (week 5)
  - o Initiate elliptical machine (week 5)

#### Week 6

- Single leg balance-firm to soft surface with external perturbation (ball catch, sports specific/simulated ex.)
- Leg Press (gradually increasing weight)
- o Physioball hamstring ex.- hip lift, bent knee hip lift, curls, balance
- o Superman on physioball- 2point on physioball
- o Knee extensions, hamstring curls
- o Manual/Theraband PNF
- Sidestepping with resistance (pause on effected limb), sports cord walking forward and backward (pause on effected limb)
- o Bosu squats

#### Goals

- 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 ex.

Single leg stance with level pelvis

#### Phase 3: Advanced exercises

- Weeks 7-8
  - Full squats
  - o Single stability ball bridges
  - o 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
  - o 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 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: Sports specific training rehab clinic based progression

- Weeks 9-11
  - o All phase 3 exercises
  - o Single leg pick ups, add soft surface
  - o Pool running (progress from chest deep to waist deep), treadmill jogging
  - O Step drills, quick feet step ups (4-6 inch box) forward, lateral, carioca
  - o 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