

Femoroplasty

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

- **Allowed full weight bearing, but use crutches for four weeks.**
 - 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.
- **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
 - Must initiate and maintain immediately postop

PHASE 1:

WEEK 1

Initial Exercises (*Weeks 1-3*)



Weight shifts – sitting, supported, anterior/posterior, lateral



Ankle pumps

PHASE 1: **WEEK 1**

Initial Exercises (*Weeks 1-3*)



Seated knee extensions



Hamstring sets



Glut sets



Adductor isometrics



Quad sets



Heel slides, active-assisted range of motion

PHASE 1:

WEEK 1

Initial Exercises (*Weeks 1-3*)



Log rolling



Double leg bridges



Pelvic tilt



Prone on elbows



Trunk rotation



Prone knee flexion

PHASE 1:

WEEK 1

Initial Exercises (*Weeks 1-3*)



Standing abduction without resistance



Standing flexion without resistance



Standing adduction without resistance



Pain dominant hip mobilization – grades I, II



Standing extension without resistance

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*)



Supine marching, modified dead bug



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



Abduction isometrics



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



Superman



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

PHASE 1:

WEEK 2

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



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

Other Exercises Week 2

- 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*)



¼ Mini squats



Hip flexion, IR/ER in pain-free range



Standing heel lifts



Double leg bridges to single leg bridges

PHASE 1:

WEEK 3

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



Clamshells (pain-free range)



Quadruped 4 point support, progress 3 point support, progress 2 point



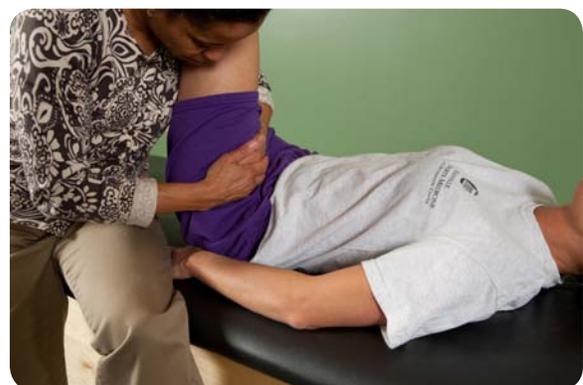
Leg raise – Abduction



Seated physioball progression – hip flexion



Leg raise – Extension



Hip mobilization – inferior glides in flexion

PHASE 1:

WEEK 3

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



Stiffness dominant hip mobilization – grades III, IV

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

Other Exercises Week 3

- Wall mini-squats
- Physioball mini-squats with cocontraction
- Leg raise – Adduction
- Kneeling hip flexor stretch (short of pain)
- Active range of motion with gradual end range stretch within tolerance

PHASE 2:

WEEKS 4-5

Intermediate Exercises (*Weeks 4-6*)



Crunches



Standing theraband/pulley weight – Abduction

PHASE 2: **WEEKS 4-5**
Intermediate Exercises (*Weeks 4-6*)



Standing theraband/pulley weight – Adduction



Single leg balance – firm to soft surface



Standing theraband/pulley weight – Flexion



Shuttle leg press 90 degree hip flexion with co-contraction of adductors



Standing theraband/pulley weight – Extension



Clamshells with theraband

PHASE 2:

WEEKS 4-5

Intermediate Exercises (*Weeks 4-6*)



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

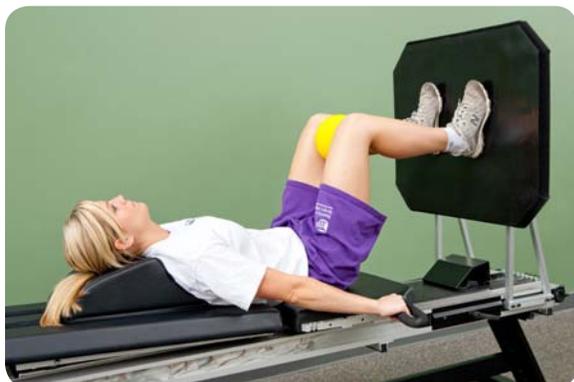
Other Exercises Weeks 4-5

- Wean off crutches after 4 weeks
- Gradually increase resistance with stationary bike
- Single leg sports cord leg press (long sitting) limiting hip flexion
- Pool water exercises – flutterkick swimming, 4 way hip with water weights, step-ups
- Initiate elliptical machine

PHASE 2:

WEEK 6

Intermediate Exercises (*Weeks 4-6*)



Leg press (gradually increasing weight)



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

PHASE 2:

WEEK 6

Intermediate Exercises (*Weeks 4-6*)



Superman on physioball – 2 point on physioball



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



Bosu squats

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 – 25 yds. 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

PHASE 4:

WEEKS 12 & BEYOND

Sports specific training on field or court

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