

Precautions:

- **Partial flat foot weight bearing (FWB) with crutches for 2-6 weeks at your surgeon's direction. Wean from crutches slowly with normalized gait and pain free.**
- **Protect against excessive forces onto hip joint**
- **No hip flexion beyond 90 deg flexion**
- **Limit abduction to 25 deg for 2 weeks**
- **Avoid external rotation for 4-6 weeks. No ER greater than 20 deg first 3 weeks**
- **Protect against torsional twisting forces**
- **Limit aggressive functional activities until 12 weeks or as advised by physician**

General Goals:

- **Control pain and inflammation**
- **Restore muscle strength but avoid exercises that engage iliopsoas during first several weeks.**
- **Gradually restore ROM and flexibility. AAROM exercises are begun early (first 2-5 days postop). Avoid pushing into extreme range or pain.**
- **Patient awareness of rehabilitation timeline is 4-6 months. This is a marathon not a sprint.**

PHASE I

PHASE I: IMMEDIATE POSTOPERATIVE PHASE (PROTECTIVE PHASE, DAY 1 TO WEEK 4)

Goals:

- **Promote healing of tissue, protection**
- **Control pain and inflammation**
- **Minimize effects of immobilization**
- **Prevent scarring**
- **Restore ROM**
- **Prevent muscular inhibition**

PRECAUTIONS:

- **No pivoting**
- **Manage and treat anterior hip pain**
- **Do not push through pinching**
- **Use axillary crutches starting with flat foot WB, wean off at 2-3 weeks as gait normalizes**

Exercises (to be performed 2-3 times a day):

- **Ankle pumps, quad sets, glute sets**
- **Heel slides into knee to chest stretch (easy and painfree – 5x hourly)**
- **Pelvic tilt**
- **AAROM hip, PROM hip and knee**
- **Hip adduction isometrics**

PHASE I CONTINUED: (PROTECTIVE PHASE, DAY 1 TO WEEK 4)

Exercises:

- Prone Positioning – prone on elbows, prone knee flexion. Avoid passive unilateral extension for 3 weeks.
- Seated knee flexion (no SLR for 4-6 weeks)
- UBE and upper body strengthening

Week 1:

- Soft tissue massage and scar mobs
- Isometrics: quad, glute, TvA
- Upright bike or recumbent bike (no resistance), start PODI

Week 2:

- Stationary bicycle 10 min if tolerated
- Supine marching
- Isometric add/abduction
- Standing hip abduction and adduction (no resistance)
- Ankle pumps
- Supine knee bent trunk rotations
- Joint mobilizations (grade I-II)

Week 3: Continue all exercises above

- AAROM and PROM: hip flexion, IR/ER pain free
- ¼ mini squats
- Calf raises
- Bridging progression to single leg bridge
- Clam shell in pain free range
- Hip mobilization
- Gravity eliminated SLR flexion (sidelying)
- Sidelying abd/add
- Standing hip extension
- Kneeling hip flexor stretch
- Quadriped progression 4 pt – 3 pt – 2 pt support. Consider all four belly lift for TA engagement.
- Front plank on knees
- Seated stability ball exercises
- Cardio for upper body
- Pool walking (once incision is closed and patch applied, water level to axilla)

PHASE II: MODERATE PROTECTIVE PHASE (WEEK 4-8)**Goals:**

- Restore pain free motion
- Prevent muscular inhibition and facilitate muscle activation
- Normalize gait without crutches
- Neuromuscular re-education and improve single leg control
- No pain with functional movements including steps, squat, modified lunge
- Engage core

Criteria for progression to Phase II:

1. Minimal pain with Phase I exercises
2. Minimal ROM deficits
3. Normalized gait with one crutch

PRECAUTIONS:

- Post activity soreness should resolve within 24 hrs
- No ballistic or forced stretching
- Avoid post activity swelling
- Caution with cardio activities with repetitive hip flexion such as treadmill or Stair Master

Week 4-5: Continue all ROM, flexibility and stretching including hip mobilization

- Increase time and resistance on bike
- Wean off crutches after week 4
- Progress isotonic strengthening
- Standing resisted 4 way hip exercises
- Leg press to 75 deg hip flexion with adductor activation
- Clam shell
- Forward and lateral cone walks with visual disturbances
- Hip and core strengthening – non impact progressing from double to single leg and proprioception drills
- Half kneeling progressions
- Exercise ball for posterior chain strengthening
- Initiate elliptical (week 5)
- Double leg squat progression
- Supermans
- Lateral stepping with resistance, monster walks
- PNF patterns
- Aquatic progression – flutter kick, 4-way hip with weights
- Cardio exercises – non impact endurance training, stationary bike, Nordic Track, swimming

PHASE III: ADVANCED EXERCISE PHASE (WEEK 9-12)

Goals:

- Restore strength and build endurance
- Good control and no pain with sport/work specific movements, including impact activities

Criteria for progression to Phase III:

1. Normal gait on all surfaces
2. Ability to carry out functional movements without unloading affected leg or pain, while demonstrating good control
3. Single leg balance greater than 15 seconds
4. No pain or tenderness with functional drills and/or activities

PRECAUTIONS:

- Post-activity soreness should resolve within 24 hours
- No ballistic or forced stretching
- Avoid post-activity swelling or muscle weakness
- Be cautious with repetitive hip flexion activities, such as treadmill and StairMaster

Exercises (week 9-12):

- Continue progressive isotonic strengthening
- Continue ROM, flexibility and stretching exercises
- Elliptical/stairmaster
- Balance squats
- Lateral step-downs
- Lunges
- Multiplanar
- Single leg squat
- Forward box lunges
- Side-to-side lateral movement
- Impact control exercises: 2 feet to 2 feet, 1 foot to other foot, same foot
- Agility ladder
- Sport-specific drills

PHASE IV: INTERVAL PROGRAMS (WEEK 12-16)

Criteria:

- No pain
- Full ROM
- Normal gait

PHASE IV CONTINUED: INTERVAL PROGRAMS (WEEK 12-16)

Week 12-16:

- When pt demonstrates good single leg landing control
- Biking progression
- Running progression
- Golf progression

PHASE V: SPORT (WEEK 16-20)

Criteria:

1. Must pass functional hip sport test
2. Must have full pain free ROM
3. Must demo strength of surgical leg to be 85% or greater than opposite leg
4. Ratio of hip ABD to ADD strength should = 80%
5. Must demo good control and balance of trunk and LE with functional activities

Week 16-20:

- Functional sport test
- Multi-plane agility
- Plyometrics
- Sport-specific drills