## Hip Arthroscopy Physical Therapy Instructions and Patient Education

### Use of Brace and Crutches:

* If you were prescribed a brace, wear the brace at all times of weight bearing for the first 3 weeks after surgery. This may be prescribed to protect your hip and limit motion into hip extension (bringing your leg behind your body).
* Crutches used for the first 3-6 weeks after surgery.
* Weight bearing on the surgical leg is limited to 20 pounds of pressure. After 3 weeks, work with your Physical Therapist to wean off crutches as pain, strength, endurance and mobility allows. This is typically completed over 1-2 weeks time.
* Early “flat foot” weightbearing is allowed for balance and to replicate a normal stride during crutch use. Avoid putting all of your weight on the operative extremity.

\*\*If microfracture was done, weight bearing is limited to non-weight bearing and restrictions are extended to **6 weeks**\*\*

### Motion Restrictions and Exercises:

You will be restricted in certain motions of your hip for the first **3 weeks after surgery**.

\*\*Avoid active SLR (straight leg raise)

\*\*PROM exercises should be pain free\*\*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Flexion** (knee toward chest) | **Extension** (bringing leg behind the body) | **Abduction** (leg out to the side) | **Internal Rotation** (turning toes/knee toward other leg) | **External Rotation** (turning toes/knee away from other leg) | **Circumduction** (gentle pendulum motion) |
| 90° limit | AVOID | 30° limit | 30° limit | 20° limit | Perform at 30 and 70 degrees of flexion |

### Range of motion (ROM) exercises:

* Passive range of motion (ROM) will be completed at home with the help of a caregiver. –

## Plan to have your caregiver come to your first Physical Therapy appointment so your therapist can teach them how to perform these motions.

* When performing ROM do NOT push through pain. Even if you do not reach the degree of motions noted above, do what you can without pain. The motion will come.
* Avoid pushing hip internal rotation especially if pain is present with this motion.

### CPM:

* In some scenarios, a CPM machine will be prescribed.
* CPM machine can be used for up to 4 hours a day.
* Stationary bike (without resistance) up to 20 minutes is also recommended at this time for assistance in ROM.

### Positional Precautions:

Do NOT sit more than 20-30 minutes at a time. Do NOT lift your leg on its own (SLR).

Do prone lying (on your stomach) for 2 hours per day.

### How much pain is ok?

Mild to moderate discomfort during exercise is ok as long as pain improves with repetitions, does not become worse during activity, diminishes with rest, and no residual pain >24 hours after a PT session.

## Hip Arthroscopy Protocol

### Phase Based:

Phase I- Protection/education

Phase II- ADL’s and return to community based function without pain or irritation. Phase III- Return to PLOF

Phase IV- Sport specific for athletics/higher level mobility

\*\*Booster sessions during discharge phase (between phase III and IV)\*\*

### Phase I (Protection/Education):

Precautions-

* + Follow ROM precautions and weight bearing status noted above.
  + Avoid pain and tissue irritation as noted by pain lasting more than 24 hours.
  + Do NOT perform supine SLR.

Goals-

* Promote tissue healing and proper muscle activation (Glutes, Quads, Core/Trunk/Abdominals)
* Improve pain free ROM and address soft tissue restrictions as needed.
* Progressive ambulation away from brace and crutches without compensation
* Provide patient education.

Progression Criteria-

* + Pain free and non antalgic ambulation without assistive device for household and modified community mobility.
  + Hip PROM 80% of contralateral side.
  + Hip AROM adequate for functional activities (walking, sit<>stand)
  + 30 second sit to stand test pain free to completion and without compensation.
  + SL stance 30 sec without compensation of the femur and pelvis in any plane of motion.

\*\*Defer per WB precautions for micro-fracture\*\*

### Phase II (Activities of Daily Life and Community Mobility):

Precautions-

* + Avoid Pain.
  + Can begin gentle capsular mobilizations if indicated by exam.
  + No plyometrics/agility/heavy loading.

Goals-

* Regain full ROM in all planes.
* Improve LE and core strength, endurance, balance and control.
* Consistently demonstrate appropriate mechanics with functional mobility.
* Return to community ambulation and stairs pain free with good lumbo-pelvic stability and control.

Progression criteria-

* + Unrestricted pain free ambulation including stairs with good femoral and lumbo-pelvic control and stability.
  + Hip PROM 100% contralateral side.
  + Plank and side plank on knees for 60 seconds without compensations or breakdown in form.

AND

* + Dynamometer “make test” 80% to contralateral side in all cardinal planes OR
  + 80% repetitions to failure side lying hip ABD on wall, 10# resisted standing march, and 10# resisted prone hip extension off table.

### Phase III (Return to PLOF):

Precautions-

* + Avoid persistent pain and break down in form with advancing activity including load and volume.

Goals-

* Begin running progression, plyometrics, agility, cutting and progression to sport specific activities.
* Advance LE and core strength, endurance, balance and control with appropriate mechanics for high level activities.
* Initiate return to running progression 12-16 weeks pending MD clearance.

Progression Criteria-

For those ready to D/C:

* + Continuous SL squat to 60 degrees without femoral and lumbo-pelvic compensation for 60 sec.
  + Y-balance test > 90%
  + Plank and side plank 60 seconds without compensations or break down in form. AND
  + Dynamometer “make test” 90% to contralateral side in all cardinal planes OR
  + 90% repetitions to failure sidelying hip ABD on wall, 10# resisted standing march, 10# resisted prone hip extension off table.
  + Symmetrical maximal depth double leg squat x20 repetitions.
  + Return to PLOF with minimal symptoms.

### Exercise Appendix:

Below are general guidelines for appropriate exercises based on time from surgery. Patients should be regularly re-evaluated, prescribed appropriate exercise based on their observed impairments, and have adjustment made in their program based on symptom response.

# PHASE 1

PT Pointers:

-NO Active open chain hip flexor activation.

-Emphasize Proximal Control. Exercise Examples:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date of surgery: | Week | 1 | 2 | 3 | 4 | 5 | 6 |
| Stationary bike (20 min, Increase time at week 3  as patient tolerates) | Daily | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Soft tissue mobilization (specific focus to the adductors, TFL, Iliopsoas, QL and Inguinal  ligament) | Daily (20-30 minutes each  session) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Isometrics  -quad, glutes, TA | daily | ✓ | ✓ |  |  |  |  |
| Diaphragmatic breathing | daily | ✓ | ✓ |  |  |  |  |
| Quadriped  -rocking, pelvic tilts, arm lifts | daily | ✓ | ✓ | ✓ |  |  |  |
| Clams/reverse clams | daily | ✓ | ✓ | ✓ |  |  |  |
| TA activation with bent knee fall outs | daily | ✓ | ✓ | ✓ |  |  |  |
| Bridging progression | 5x/week |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| Prone hip ER/IR, hamstring curls | 5x/week |  | ✓ | ✓ | ✓ | ✓ | ✓ |

# PHASE 2

PT Pointers:

-Advance ambulation slowly without crutches/brace as patient tolerates and avoid any compensatory patterns.

-Provide tactile and verbal cueing to enable non-compensatory gait patterning.

-Advance exercises only as patient exhibits good control (proximally and distally) with previous exercises.

-If Micro Fracture was performed, Hold all weight bearing exercises until week 6.

Exercise Examples

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date of Surgery: | Week | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| Progress off crutches starting week  3 |  | ✓ |  |  |  |  |  |  |  |
| Continuation of soft tissue mobilization to treat specific  restrictions | 2x/week | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Joint Mobilizations posterior/inferior  glides | 2x/week |  |  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Joint Mobilizations anterior glides | 2x/week |  |  |  |  | ✓ | ✓ | ✓ | ✓ |
| Prone hip extension | 5x/week | ✓ | ✓ | ✓ |  |  |  |  |  |
| Tall kneeling and ½ kneeling w/ core and shoulder girdle  strengthening | 5x/week | ✓ | ✓ | ✓ | ✓ |  |  |  |  |
| Standing weight shifts: side/side  and anterior/posterior | 5x/week | ✓ | ✓ |  |  |  |  |  |  |
| Backward and lateral walking no  resistance | 5x/week | ✓ | ✓ |  |  |  |  |  |  |
| Standing double leg ⅓ knee bends | 5x/week |  | ✓ | ✓ | ✓ |  |  |  |  |
| Advance double leg squat | 5x/week |  |  |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| Forward step ups | 5x/week |  |  |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| Modified planks and modified side  planks | 5x/week |  |  |  | ✓ | ✓ | ✓ | ✓ | ✓ |
| Elliptical (begin 3 min, ↑ as  tolerated) | 3x/week |  |  |  | ✓ | ✓ | ✓ | ✓ | ✓ |

# Phase 3

PT Pointers:

-Focus on more FUNCTIONAL exercises in all planes.

-Advance exercises only as patient exhibits good control (proximally and distally) with previous exercises.

-More individualized, if the patients demand is higher than the rehab will be longer. Exercise Examples:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Date of surgery | Week | 8 | 9 | 10 | 11 | 12 | 16 |
| Continue soft tissue and joint  mobilizations PRN | 2x/week | ✓ | ✓ | ✓ | ✓ | ✓ |  |
| Lunges forward, lateral, split squats | 3x/week | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Side steps and retro walks w/ resistance (begin w/ resistance more  proximal) | 3x/week | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Single leg balance activities: balance,  squat, trunk rotation | 3x/week | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Planks and side planks (advance as  tolerated) | 3x/week | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Single leg bridges (advance hold  duration) | 3x/week | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Slide board exercises | 3x/week |  |  | ✓ | ✓ | ✓ | ✓ |
| Agility drills (if pain free) | 3x/week |  |  | ✓ | ✓ | ✓ | ✓ |
| Hip rotational activities (if pain free) | 3x/week |  |  | ✓ | ✓ | ✓ | ✓ |

# Phase 4

PT Pointers:

-It typically takes 4-6 months to return to sport, possible 1 year for maximal recovery.

-Perform a running analysis prior to running/cutting/agility.

-Assess functional strength and obtain proximal control prior to advancement of phase 4.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Date of surgery | Week | 16 | 20 | 24 | 28 | 32 |
| Running |  | In Alter  G | ✓ | ✓ | ✓ | ✓ |
| Agility |  |  | ✓ | ✓ | ✓ | ✓ |
| Cutting |  |  |  | ✓ | ✓ | ✓ |
| Plyometrics |  |  |  | ✓ | ✓ | ✓ |
| Return to sport specifics |  |  |  | ✓ | ✓ | ✓ |