Post-Operative Guide to Rehabilitation after Femoroacetabular Impingement (FAI) Surgery with/without Labral Repair

Post Operative Phase Goals	Restrictions	Management Recommendations	Outcome Analysis
Phase I: Maximum Protection (Day 1 – 3 Weeks) 1. Reduce post-operative pain and inflammation. 2. Limit stress to the femoral neck and labrum (if repaired). 3. Protect the integrity of the soft tissues, particularly the capsule. Secondary focus is to (i) commence restoration of uniplanar ROM and (ii) normalize of gait with an assistive device.	1. Limit weight-bearing on surgical limb to <20 lbs of force using underarm crutches. (unless instructed to be non-weight-bearing by surgeon). 2. Limit ROM of the surgical hip: ➢ Extension <10° ➢ External Rotation <10° ➢ Abduction <25° ➢ Flexion to 90° ➢ No combined movements 3. Avoid use of hip flexors to minimize tendon irritation.	1. Protection (hip brace and gait aids) 2. Early hip mobility: ➢ Upright bike ➢ ROM within restrictions 3. Pain and inflammatory control – medications, ice/cryotherapy 4. Core activation & breathing 5. Scar management 6. Gait retraining	Patient Report Tool: iHOT-12 Functional Test: N/A N.B. Functional testing to be completed at end of each phase in order to progress to next phase.
Phase II: Mobility and Neuromuscular Retraining (3– 6 Weeks) 1. Restore uniplanar ROM. 2. Restore lumbo-pelvic core stability. 3. Re-establish neuromuscular control. 4. Normalize gait with an assistive device. Continue to focus on the goals from the previous phase.	1. Limit weight-bearing on surgical limb to 50% at week 4. Then WBAT at week 6 unless otherwise specified. 2. Limit ROM of the surgical hip: ➢ Extension <15° ➢ External Rotation <20° ➢ Abduction <25° ➢ Flexion to 120° 3. Avoid use of hip flexors to minimize tendon irritation.	1. ROM in uniplanar planes within limitations. 2. Controlled passive circumduction. 3. Proprioceptive retraining; weight shifting onto surgical limb. 4. Gait retraining with assistive device; load acceptance and normalize. 5. Static core retraining. 6. Scar management. 7. Restore hip hinge.	Patient Report Tool: iHOT-12 Functional Test(s) to progress to Phase III: Single Leg Bridge ➢ Surgical hip >85% vs. non-surgical. Introduce 3-point SEBT ➢ Begin with SLS in test area (timed duration vs. non-surgical)
Phase III: Muscle Balance and Strengthening (6-12 Weeks) 1. Restore full (combined) hip ROM. 2. Re-establish muscle balance. 3. Optimize proprioception. 4. Demonstrate dynamic lumbo-pelvic stability during low-demand exercises. 5. Normalize gait without an assistive device. Continue to monitor (i) pain & inflammation (ii) integrity of hip flexor, capsule, & labrum; and (iii) patient adherence to activity modification guidelines.	1. Avoid painful stretches and ROM. 2. Refrain from high velocity, low amplitude thrust techniques through the hip joint. 3. Avoid impingement + anterior hip pain with functional exercises. 4. Avoid uncontrolled twisting/pivoting on surgical limb.	1. Manual therapy to restore full ROM in Flex + Ext quadrants 2. Dynamic core retraining. 3. Activation – Strength – Endurance ➢ Deep hip rotators ➢ Hip + Lumbopelvic stabilizers 4. Global hip strengthening via lower demand functional exercises (ensure load transfer restored). 5. Progress proprioceptive exercises to unstable surfaces.	Patient Report Tool: iHOT-12 Functional Test(s) to progress to Phase IV: 3 point SEBT ➢ Affected limb >85% of composite score to progress[1]. N.B.: the strength of all hip girdle musculature should be at least 4/5 (MMT) by the end of this phase.

Phase IV: Functional Training of the Hip and Lower Extremity (12-18 Weeks) 1. Build strength and endurance of the trunk, hip, and thigh musculature (MMT >4/5) to avoid alterations of lower extremity alignment during functional activities. 2. Normalize gait mechanics with adequate lateral hip stability before lower kinetic chain strengthening is advanced. 3. Demonstrate suitable dynamic balance and proprioception. Gauge if the patient can (i) demonstrate non-compensated activities and higher-demand work functions (ii) be independent with home and gym programs, and (iii) maintain adherence to activity modification guidelines.	1. Avoid impingement + anterior hip pain with functional exercises. 2. Avoid being symptomatic following home and gym programs. Return to work requires surgeon consent.	1. Advanced Functional Training *(progress from Phase III)* – emphasis placed on preparatory exercises for RTW and/or RTP. 2. Progression of single-leg proprioceptive exercises on unstable surfaces. 3. Low level plyometrics.	Functional Test (s) to progress to Phase V: 3 point SEBT ➢ Surgical limb should be >94% of non-surgical composite score and <4 cm difference in reach for each direction[2]. Triple Hop for Distance ➢ Surgical limb should be >85% of non-surgical limb on limb symmetry index[3].
Phase V: Advanced Training – Specificity for Return to Sport and/or Work (18-24 Weeks) 1. Achieve trunk, hip, and thigh muscle strength equivalent to 5/5 (MMT grading). 2. Demonstrate dynamic lumbo-pelvic stability during high-demand single-limb exercises. 3. Optimize functional strength, endurance, and power within the lower kinetic chain. Monitor that the patient is (i) independent with an advanced home and gym program, and (ii) safe and effective in their return to sporting or work/activities at their pre-injury level.	1. Avoid being symptomatic following work and sport activities. ➢ Patients should return to a pain-free competitive state without any acute inflammatory episodes. ➢ Patients must be closely monitored, because they will be the most active they have been in months/years. Return to sport requires surgeon consent.	1. Higher level plyometrics 2. Agility retraining 3. Progression of exercises should be oriented to patient goals and requirements of work/sport N.B. Strong communication and clinical reasoning required.	Patient Report Tool: iHOT-12 Functional Tests: Cross-over hop for distance ➢ Surgical limb should be >85% of non-surgical limb on limb symmetry index[3].