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Hip Impingement & Labral Non-Op PROTOCOL

ACUTE PHASE I: 0-4 WEEKS

GOALS

Patient education re: rest, NSAIDs, activity/ADL modification to adapt to hip morphology, decrease compression and painful movements, cessation of sports or other aggravating factors

Address hip ROM deficits if any

Stretching structures abound hip complex i.e. muscles, capsule (if needed and if pain free)

Address motor control deficits around lumbo-pelvic-hip complex

Strengthening weak key muscle groups

Baseline proprioception and effective weight transfer without compensatory movement patterns

EXERCISE SUGGESTIONS

ROM & Flexibility

Stretches/ROM:

Hip extension / anterior capsule,

Hip flexion, Add/Abductors

IR at 0° and in flexion positions, ER

Quadruped rocking for hip flexion (pain free, ensure neutral spine)

Stationary bike high seat avoid deep hip flexion (pain)

Distraction: manual/belt assist in restricted ROM

**only indicted if loss of motion in a particular range

Muscle Strength & Endurance

Lumbo-Pelvic (core stability):

Supine Transverse abdominis (TA) and Pelvic floor setting. **cueing should be specific to lifting pelvic floor and indrawing lower abdominal (effort scale for pelvic floor/abdominal contraction should be 2-4 out of 10 with normal breathing)

Basic supine TA and pelvic floor:

Inner range bent knee fall outs → full range

heel march → march (active hip flexion)

heel slides → heel slides + hip flexion (assisted with belt under femur → active)

single leg heel taps as tolerated

**Requires activation of TA and pelvic floor to maintain centralization of the femoral head with lower extremity exercise

Standing, sitting, walking, and weight-bearing postures with TA and pelvic floor

Hip/Gluteals/Hamstrins/Quadriceps:

Prone hip extension off edge of bed

Clam shells → isometric side lying hip abduction → isotonic hip abduction

Supine bridging: double, single, on ball

Standing hip extension, abduction progress to pulleys or ankle weights (do not allow trunk shift)

Shuttle 2→1 leg as tolerated

Squats: wall, mini, progress to deeper squats as able

Proprioception:

2 legs:

Equal weight bearing: forward/backward and side-to-side \rightarrow progress to single leg weight shift with core

activation and hip/pelvic control

Wobble boards with support: side-to-side, forward/backward

SUB-ACUTE PHASE II: 4-12+ WEEKS

GOALS

Continue flexibility exercises in pain free ranges if required

Progress exercises to include more challenges to lumbo-pelvic-hip control (core stability)

Strengthen weak key muscle groups with functional closed chain exercises

Progress proprioception to single leg without compensatory movement patterns

EXERCISE SUGGESTIONS

ROM & Flexibility

Quadruped rocking with IR/ER bias

Stationary bike → Elliptical forward (with TA/pelvic floor setting)/backward → Stairmaster with TA/pelvic floor setting and adequate pelvic/hip control (i.e. absent trendelenberg, pelvic rotation)

Treadmill: walk forward \rightarrow backward (for hip extension), side stepping, interval jog \rightarrow jog, interval run \rightarrow run (if tolerated)

Muscle Strength & Endurance

Lumbo-Pelvic (core stability) +Gluteals/Hamstrings/Quadriceps:

Advanced core: side plank (on elbows/feet), prone plank (on elbows/toes)

Continue hip strengthening with increased weights/tubing resistance

Hip IR/ER with pulleys → theraband in flexed, neutral, extended positions

Hamstring curls, eccentrics, deadlifts $2 \rightarrow 1$ leg

Quadruped - alternate arm & leg lift

Shuttle work on strength & endurance, $2 \rightarrow 1$ leg (progress with increased resistance)

Shuttle side lying leg press (top leg)

Shuttle standing kick backs (hip/knee extension)

Sit to stand: high seat, low seat, 2 legs, single leg

Single leg stance (affected side), hip abduction/extension (unaffected side)

Single leg stance with hip hike

Sahrman single leg wall glut med (both sides) → + mini squat

Tubing kickbacks/mule kicks (both sides)

Lunge: static . - . range → full range

Lunge walking, forwards/backwards, hand weights

Side stepping → shuffling → hopping +/- theraband (thigh/ankle)

Profitter: abduction, extension, side-to-side
Single leg: wall squat → mini squat → dead lift

Forward and lateral step-ups 4-6-8" (push body weight up through weight bearing heel slow and with

control, also watch for hip hiking or excessive ankle dorsiflexion)

Eccentric lateral step down on 2-4-6" step with control (watch for hip hiking or excessive ankle dorsiflexion)

Proprioception

2 legs→1 leg:

Wobble boards: without support: side-to-side, forward/backward vision, vision removed, 2 legs,

Wobble boards: single leg: side to side, forward/backward Standing on . foam roller: balance → rocking forward/backward

Single leg stance $5 \rightarrow 30 \rightarrow 60$ seconds (when full WB without trendelenberg or pelvic rotation)