

## Manoj P. Reddy, MD

Sports Medicine & Shoulder Surgery
Orthopedic Associates of Dallas
469.800.7200 office | 469.800.7210 fax
DallasOrtho.com
ReddyOrtho.com

## **Non-Operative Rehabilitation Protocol**

# NON-SURGICAL MANAGEMENT FOR FEMORAL ACETABULAR IMPINGEMENT

#### **ACUTE PHASE 0-4 WEEKS**

- decrease compression and painful movements, cessation of sports or other aggravating factors.
- Address hip ROM deficits if present
- Stretching structures of the hip complex (muscles, capsule) painfree.
- Address motor control deficits of lumbo-pelvic-hip complex
- Strengthening weak musculature
- Baseline proprioception and effective weight transfer without compensatory movement patterns.

#### **EXERCISES**:

#### ROM AND FLEXIBILITY

- Stretches/ROM
  - hip extension/ anterior capsule
  - hip flexion, add/abductors
  - IR at 0 degrees and in flexion positions
- Quadruped rocking for hip flexion (pain free, neutral spine)
- Stationary bike high seat avoid deep hip flexion and pain
- Distraction: manual/belt assist in restricted ROM.

#### MUSCLE STRENGTH AND ENDURANCE

- supine transverse abdominis and pelvic floor setting.
- Basic supine TA and pelvic floor:
  - inner range bent knee fall outs working toward full range.
  - Heel march supine
  - Heel slide progressing to heel slide with hip flexion.
- Standing, sitting, walking and weight bearing postures with TA and pelvic floor

## Hip/Gluteals/Hamstrings/quadriceps:

- prone hip extension off edge of bed
- clam shells progressing to isometric side lying hip abduction to isotonic hip abduction.
- Supine bridging: double, single, on ball
- Standing hip extension, abduction progress to pulleys or ankle weights (do not allow trunk to shift)
- Squats: wall, mini, progress to deeper squats as able.

#### PROPRIOCEPTION:

#### 2 LEGS:

- Equal weight bearing: forward/backward and side to side progress to single leg wt. shift with core activation and hip/pelvic control.
- Wobble board with support: side to side, forward and backward.
- Standing on ½ foam roller: balance progressing to rocking forward/backward.

#### SUB-ACUTE PHASE: WEEKS 5-12

#### **GOALS:**

- Continue flexibility exercises in pain free ranges as needed.
- Progress exercises to include more challenges to lumbo-pelvic-hip control.
- Strengthen weak key muscle groups with functional closed chain exercises.
- Progress proprioception to single leg without compensatory movement patterns.

#### ROM AND FLEXIBILITY

- Quadruped rocking with IR/ER bias.
- Stationary bike progress to Elliptical then to stairmaster. No pelvic rotation
- Treadmill: walk forward progress to backward for hip extension then side stepping then to interval walk/jog then jog then interval run and then run if tolerated.

#### MUSCLE STRENGTH AND ENDURANCE

- advanced core: side plank and prone plank
- Continue hip strengthening with increased weights/tubing for resistance.
- Hip IR/ER with the raband in flexed neutral and extended positions
- Hamstring curls, eccentrics
- Quadruped alternating arm and leg lift
- Sit to stand: high seat low seat, both legs, single leg.
- Single leg stance
- Sahrman single leg wall glut med (both sides)
- Tubing kickbacks/mule kicks both sides.
- Lunge: static ½ ½ range to full range
- Lunge walking forward backward and weights in hands.
- Side stepping, shuffling progressing to side step hops (theraband)
- Single leg wall squat progressing to mini squat
- Forward and lateral step ups 4-6-8 "
- Eccentric lateral step down on 2-4-6 step with control watch for hip hiking.

## **PROPRIOCEPTION**

### 2 Legs progressing to 1 leg

- wobble boards without support side to side and forward and back.
- standing of ½ foam roller rocking forward and backward.
- Single leg stance 5-60 seconds then progress to unstable surface.

This protocol provides the rehabilitation specialist with general guidelines for the rehabilitation of the patient with FAI.