Dynamic Chiropractic

REHAB / RECOVERY / PHYSIOTHERAPY

Rehab Following Hip Replacement

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Jeanne is a 67-year-old female, 5 feet 7 inches tall and 159 pounds. I first saw her for a second-opinion evaluation. An orthopedic surgeon had recommended bilateral hip replacement surgery and she wanted to know if there was anything else that could be done before undergoing surgery. She had heard that I use the warm laser and was "into rehab," so she was hoping it could help her avoid surgery. She reported right and left anteromedial and posterior hip pain that began after a lifetime of playing tennis, and had been experiencing progressively worse pain in her right groin for 3-4 months. She had received cortisone injections and tried various anti-inflammatory medications without relief.

MRI showed significant bilateral hip degeneration. The pain was evident when she walked. She stood with a slight degree of swayback and posterior pelvic tilt. She had poor gluteal muscle definition and practically no hip extension mobility. Both hips were slightly medially rotated when standing and walking. I concurred with the surgeon and felt surgery was her best option.

A month after our first encounter, the patient had a bilateral hip replacement surgery. She returned to my office for her postsurgical hip rehabilitation. Prior to the surgery, she had been unable to perform her regular workouts due to pain. Lack of activity had caused a 20-pound weight gain. More important to Jeanne than gaining back lost hip range of motion was losing those 20 pounds.

A Comprehensive Rehab Program

I wrote out a program that would accomplish the surgeon's rehab goals in six weeks, with another four weeks to accomplish Jeanne's personal goal of 20-pound weight loss. Total time to lose 20 pounds would be 10 weeks. Bioimpedance analysis revealed 28.4 percent fat mass (45.2 lbs/159 lbs fat mass), and 71.6 percent lean body mass (113.8/159). We agreed to perform weekly "weigh-in" on Monday. I was concerned she would get off track during the weekend, so I was hoping to keep her motivated by this plan and avoid weekend binges.

I instructed Jeanne on a food plan that allowed her to have 1,300-1,400 calories per day. I recommended she consume protein shakes as a breakfast meal replacement. I was determined to help her lose weight and get her hips properly functioning without causing any flare-ups that would stall our exercise progress. I needed to keep her moving so she could lose the weight.

I felt it was realistic to take off 2 pounds per week for 10 straight weeks. Post-surgery, her muscle tissue was pretty much down to a minimum and I had to factor in that once she started moving around again, she would gain muscle. I also had to make sure the diet would allow for muscle tissue growth and fat loss simultaneously. Initial home instructions included:

- Keep the hip in alignment by avoiding extreme internal rotation and hip flexion.
- Keep a pillow between the legs when in bed and for turning.
- Do not stand with the toes turned in.

- Do not sit cross-legged.
- Bend over at the hips and not the lumbar spine.
- Instructions on getting up from a seated position.
- Do not sit low on the toilet or a chair so your torso is flexed.
- During any sexual activity, lie on your back and place a pillow under your knees.

By the way, here is Jeanne's physical therapy prescription from her surgeon for her hip rehabilitation. It was pretty specific, but certainly not enough:

- Ice/heat packs as needed
- Joint mobilization (active & passive ROM)
- Isometrics
- Iontophoresis
- Massage (not over the incisions)
- Gait training (full weight)
- Ultrasound
- No leg press, leg lifts, weights or squats
- No StairMaster-type training
- No lunges
- No adduction in flexion
- Perform Thomas stretch, prone stretch, lunge stretch, sprinter stretch and ITB stretch.

I believe in doing things better. My treatment goals for Jeanne included designing a five-phase program that would 1) re establish her normal hip movement pattern; 2) re establish control of the muscles that maintain the hip in a neutral position (psoas, deep hip intrinsic muscles, quadratus femoris, and deep medial gluteals); 3) train dynamic control of all planes of motion with her own body weight as the load. These included rotational dissociation maneuvers such as supine bent-knee fall-out, supine heel slides, on-all-fours kneeling backward, and small knee bends (later progressing to squats); 4) stability training of the glute medius, maximus, minimus, iliacus and adductors; 5) extensibility training of the TFL and ITB.

The surgeon recommended a three-times-per-week in-office training schedule for the first two weeks. These sessions consisted of his prescription and the stretches he wanted performed. I also had her perform ankle circles (20 to the right, 20 to the left and 10 planarflexion/dorsiflexion, building up to three sets). On the third week I added additional exercises. The key initial maneuvers were as follows:

- From a partial hook-lying position, contract her abdominals muscles, and then to slide one leg at a time into extension. To return to hip and knee flexion, she was instructed to keep pressure on the heel to emphasize hamstring contraction and lessen hip flexor muscle contraction.
- While in a sitting position, perform knee extension while maintaining a slight lateral rotation of the hip.
- Practice sitting to standing with emphasis on the gluteal muscles.
- Contract her gluteal group at heel strike and maintain co-contraction of the abdominal muscles.

Nutritional Considerations

Jeanne lives alone and describes herself as a good a cook She's like everyone else; she has good eating days and bad eating days. I had to constantly remind her of her goals. Finally, I told her to keep a food diary, which became the evidence that seemed to control her bad days.

I advised her to eat more lean protein. By increasing lean protein intake, muscle is fed instead of starved. Remember, our goal is to lose body fat, not body weight. Supplements were recommended as part of Jeanne's healing. I do not think she would have done as well if she did not take various supplements throughout the course of treatment. Here is a partial list of the vitamin/mineral supplements she took to enhance her recovery from surgery.

- Multivitamin formula: Two capsules twice daily with food as nutritional foundation for tissue repair.
- Calcium/magnesium + co-factors: Two twice daily with food.
- EGCG: One twice daily with food. A natural anti-inflammatory.
- Ester C: 550 mg three times daily with food. Wound healing, collagen formation.
- MSM: 1,000 mg twice daily with food. Anti-inflammatory, supports bone repair.
- Pycnogenol: 100 mg twice daily with food. Anti-inflammatory qualities.
- Co-enzyme Q10: 120 mg twice daily with food. Supports cellular energy metabolism.
- N-acetylcysteine: 600 mg twice daily with food. Protects liver from adverse affects of Tylenol, supports glutathione production.
- L-glutamine powder: 1 tsp (5 gms) three times daily in water or tea. Supports glutathione production and is a building block for muscle repair.
- L-arginine: 500 mg three times daily (not with food). Supports wound healing, enhances blood flow.
- Alpha-lipoic acid: 300 mg twice daily with food. Potent antioxidant.
- Glucosamine and chondroitin: 1,500 mg once daily for joint repair.
- EPA/DHA: Two capsules twice daily with food. Anti-inflammatory, circulatory-enhancer.
- Vitamin K, 15 mg: Three once daily with food. Optimizes bone repair, combats arthritis.
- Organic silica: Five drops in water or juice daily. Optimizes bone repair.
- Vitamin D3: 5,000 IU once daily with food. Supports calcium uptake into bone.
- Gamma vitamin E: Once daily. Potent tissue antioxidant.
- Bosweilla and curcumin: 1 scoop per day. Anti-inflammatory qualities.

Encouraging Results

By the end of week three, Jeanne was able to maintain a quadruped position and rock backward with emphasis on hip flexion. In the supine position, she could start to perform hip and knee flexion with the hip in neutral. In the side-lying position, we started hip abduction. In the prone position, we started hip extension maneuvers.

By week five, I had Jeanne using a 26-pound kettlebell for gluteal activation and cardio work. She successfully managed to properly activate her gluteals. Over the next few weeks I pushed her to perform multiple sets of 15 reps of kettlebell swings. She hit every scheduled weight-training rep and weight-loss goal.

When I first met Jeanne, her gait was worse than Frankenstein. Now, brisk walking around the neighborhood allows Jeanne's heart rate to elevate to 70 percent of its max. Jeanne has committed to walking five to six times per week and building up to 30 minutes. She walks for 30 minutes in the morning before breakfast, as this timing tactic accelerates fat-burning.

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