## Lumbar Spine Surgery PT Protocols

Phase 1: Initial Post-Op (0-4 weeks)

- Focus: pain control, wound healing, and regaining mobility
- Activities:
  - Walking gradually increase walking duration and frequency, goal is walking 2-3 hours per day to help regain mobility, prevent stiffness, and prevent blood clots.
  - Breathing exercises practice taking deep breaths with the incentive spirometer to improve lung capacity, reduce pain, and prevent pneumonia
  - Gentle stretching and home exercises early activity after surgery is important to improve overall recovery
    - Move your hands, wrists, elbows, and shoulders at least 2x per hour.
      Ideally you raise your hands above your head during each one of these periods, which should only take a minute or two.
    - Move your hips, knees, and ankles at least 2x per hour. Ideally you stay active enough to prevent muscle stiffness. Ensure you are maintaining proper form and avoiding restrictions listed below.
- Restrictions:
  - Do NOT start formal physical therapy or exercise programs unless discussed with your surgeon
  - DO NOT lift more than 10 pounds. AVOID bending at the waist, twisting, or repetitive motions. Avoid running and jumping. Avoid doing any single activity (including sitting, standing, or walking) for greater than 30-45 minutes while awake during the first 4 weeks after surgery.
  - Activities that include bending/twisting/lifting such as laundry, grocery shopping, and caring for pets should be left for others, to avoid potential injury. Possible items to create a safer environment are listed below.
    - A "grabber" device. Bending and reaching up can be avoided with this lightweight tool, often sold at pharmacies and discount stores.
    - Toilet and shower equipment. Adding a shower mat, toilet riser, and a shower seat makes the bathroom safer and easier to use. Home health equipment is often covered by insurance.
    - A cane or walker. Patients who think a cane or walker would help them feel more stable can discuss this option with the surgeon.
    - A mini-fridge or cooler. Keeping cool drinks and ice packs close at hand helps patients avoid climbing stairs more than necessary.
    - A recliner or extra cushions. The seating position in a recliner takes some pressure off the lower back. Sitting on a cushioned surface is also likely to be more comfortable.
    - Fall prevention. It is best to remove anything that may be a tripping hazard, such as loose rugs or clutter. Some people also install handrails as needed, such as on stairs or in the shower.
  - You are not permitted to drive until after your 2-week post-operative visit. You must be off of all narcotic pain medication before you are cleared to drive. You

will also need to have regained almost all of your motion and be able to quickly look over your shoulder and apply the brake and gas pedals as needed. You are allowed to ride in a car as a passenger during this time.

- You are not permitted to fly until 4 weeks after surgery unless specifically discussed with your surgeon.
- No hot tubs, baths, pools, or soaking the incision until 6 weeks after surgery.
- Bracing:
  - The decision to use a brace is made on a patient-by-patient basis and is only occasionally needed. Your surgeon will discuss this with you in the office. Intermittently and especially for larger procedures braces are utilized to help with pain, posture, and as a mental reminder that you had surgery.

Phase 2: Intermediate Recovery (4-12 weeks)

- Focus: building strength, improving flexibility, and returning to daily activities
- Activities:
  - Walking keep walking for 2-3 hours a day, ideally multiple times a day to help build muscle and improve cardiovascular function
  - Physical therapy some patients may need formal physical therapy to work on range of motion, strength, and pain control if they are not satisfied with their recovery after home exercises and walking alone. This will be discussed with the surgeon at the 6 week visit.
- Restrictions:
  - DO NOT lift more than 10 pounds until cleared by your surgeon. AVOID bending, twisting, or repetitive motions as above until cleared by your surgeon.
  - Many of your lifting restrictions will be lifted after your 6 week post-operative visit. The surgeon must evaluate you in person and review imaging prior to lifting restrictions. Once restrictions are lifted, patients should gradually return to normal activities. Running and jumping should be avoided until 8 weeks after surgery.
  - Formal physical therapy and exercise programs may be recommended at the 6 week post-operative visit, though many patients will do well with the home exercise program and may not require formal therapy.
  - No hot tubs, baths, pools, or soaking the incision until 6 weeks after surgery.
  - Many patients will return to driving within 4-12 weeks. This must be discussed with your surgeon. You may not drive until you are off of all narcotics and feel comfortable quickly looking over your shoulder and applying the brake and gas pedals as needed. It is recommended that you practice in a controlled environment such as an empty parking lot prior to driving on the road.
- Bracing:
  - If you were provided with a brace, this will be weaned over the first 6-12 weeks after surgery.

Phase 3: Advanced Recovery (12+ weeks)

• Focus: Returning to pre-surgery function and activities

- Activities:
  - Progressive Strengthening continue strengthening exercises as needed
  - Return to Sport after progressing through more advanced sport specific exercises patients may return to sport without restriction. This will be assessed with physical therapists and athletic trainers.
- Restrictions:
  - Full activity without restrictions
  - Return to sport