PERI-OPERATIVE GUIDE

LATERAL INTERBODY FUSION



THE FIRST FEW DAYS AFTER SURGERY

Incisional Care

Be sure to keep the wound dry by changing the dressings at least once a day, more if needed. Your incision may drain for the first week or so after surgery. This is common and expected and should lessen as you get further out from surgery.

Regular dressing changes will prevent problems. A wet dressing will breakdown the healing skin and may lead to delayed healing and possibly infection. You may shower 72 hours after surgery, but you must keep the wound dry. If you cannot keep the wound dry, please take a sponge bath until your first postoperative visit to discuss. Concerning signs include foul smelling drainage and a "tomato red" wound.

How to Handle Post-Operative Pain

Naturally, once anesthetics have worn off, pain will become increasingly evident in the areas involved in a surgical procedure. You may not have much incisional pain after surgery because there is local anesthesia injected at the time of surgery. This will wear off in the evening. We recommend you use the pain medicine prescribed or muscle relaxant to avoid the potential for getting behind your pain.

Dr. Paul will prescribe pain-killers, also known as analgesics, to reduce the discomfort of this postsurgical recovery period. Medications prescribed can range from over-the-counter NSAIDs (after the first five days) to potent prescription opioids depending on the projected severity of pain. If you are or have undergone a fusion procedure, you should avoid NSAIDs for the first 6 weeks.

Patients should take care to manage their dosing relative to the pain experienced. Opioids can usually be tapered off within the first two weeks of surgery. NSAIDs may be taken with protective measures for the gastrointestinal system such as proton-pump inhibitors (PPIs) such as omeprazole, antacids such as TUMS, and bismuth salts such as Pepto Bismol to reduce the risk of ulcer formation.

Nighttime & Transitions

It is very common to have increased pain at night and when you first get up out of bed. Any time you remain in one position for an extended period the muscles may tighten, and swell and you can experience pain. As a result, transitioning can bring on pain.

Transitioning includes lying to sitting, sitting to standing. Anticipate this and use medication appropriately and or take time to do these activities. Do not try to move quickly. You won't do anything to harm your surgery, but you may have an increase in pain. This will improve with time.

Stairs & Toilets

You may have some mild to moderate discomfort going up and down stairs immediately after surgery. However, you are allowed to do so since you will not hurt your surgery. Similarly, getting on and off the toilet may give you some discomfort but you will not do any damage to your surgery. If you have a lower toilet, a raised toilet seat may be helpful.



WHEN TO CALL OUR OFFICE AFTER SURGERY

Reasons to Call After Hours:

- · Increasing drainage from a surgical wound or fevers greater than 101 degrees
- Significant throat swelling (after neck surgery)
- Loss of control of bowel or bladder
- Potential need to postpone scheduled surgery for the next business day

Reasons to Call During **Business** Hours:

- To make an appointment
- · Discuss or obtain test results
- Medication refills
- Inquiries regarding insurance, billing, or disability paperwork

(630) 967-2225

WE STRONGLY RECOMMEND IMPLEMENTING THE USE OF MYDULYHEALTH TO CONTACT THE OFFICE.



Communicate with your doctor.

Get answers to your medical questions from the comfort of your own home

Access your test results.

No more waiting for a phone call or mail. View results and your doctor's comments within days

Request prescription refills.

Manage and send a refill request for any of your refillable medications from inside the app

Manage your appointments.

Schedule your next appointment, or view details of your past and upcoming appointments

COMMON POST-OPERATIVE CONCERNS: Q&A

You may still experience some of your pre-operative symptoms.

This is because the nerves can take a long time to heal and may still be sensitive immediately after surgery. As healing progresses and the initial inflammatory phase as surgery resolves, the nerve irritations will resolve. This may take weeks to months in certain circumstances. Therefore, we follow our patients up to a year after surgery.

The use of pain medicines can, and most likely will, cause constipation.

If you are prone to constipation, make sure your bowels are soft and moving regularly prior to surgery for several days. Some patients will start a clear liquid diet the day before. It is especially important that you have a bowel movement within 48 hours after surgery. Opioid medications are associated with constipation, and patients should look into taking a stool softener such as docusate, and a fiber laxative such as psyllium to facilitate normal bowel movements.

Nausea and Vomiting.

If you are prone to nausea and vomiting, please let the anesthesiologist know the day of surgery. Current anesthetic practices have drastically improved these issues, but additional precautions may help. Also, Dr. Paul's team will avoid medications that may cause nausea and vomiting for you.

Infection.

Although uncommon, wounds can become infected following any operation. Redness and warmth accompanying unusually painful incisions are suggestive of infection, as well as oozing of the incision site. Risk of deep infection within the first 2 weeks after surgery is rare. If you develop a sustained fever over 101 or if you experience malodorous drainage or the incision turns deep red and sensitive to touch, please contact our office. Notify your physician immediately if any of these symptoms occur, please call or message us using the MyDulyHealth app.

Urinary Retention.

If you have had trouble urinating after other surgeries, please let Dr. Paul's team know. We can sometimes become concerned with urinary retention after surgery since this can be a sign of spinal cord compression which can lead to permanent effects if not quickly addressed. If you have a history of an enlarged prostate or prior history or postoperative urinary retention, please let us know.

It is very common to have elevated temperatures post-operatively.

You may notice your body temperature fluctuating between 99-101.0 degrees. This is commonly due to the body's reaction to the trauma of surgery, as well as pain medicine causing slight changes in breathing by not allowing our air sacs in the lungs to expand (atelectasis). Use the breathing machine (if received during your hospital stay) or be sure to take a deep breath 10 times per hour while awake to aid in keeping the lungs healthy and the body temperature down. It is very rare to develop a postoperative infection within the first 2 weeks after surgery. If you have sustained temperature greater than or equal to 101.0 or have concerns, call our office to discuss.

Sore Throat.

Surgeries performed under general anesthesia will involve placing a tube down the windpipe to facilitate breathing during the operation. Irritation can persist for a few days but will usually resolve on its own.

The Blues.

It is not uncommon to feel mildly depressed or anxious for the first 4-6 weeks after any surgery, but those feelings should go away as your daily activities and exercise resume. This is more common with larger or multilevel surgeries. If depression continues, please consult with your primary care doctor.



THE WEEKS AFTER SURGERY

WHAT TO PLAN FOR & EXPECT

2-6 WEEKS AFTER SURGERY

We often talk to patients about the first two weeks being the most difficult after a lumbar fusion. The first 2 days are the hardest in that 2-weeks. Although lateral fusions may have less back pain than traditional fusions, people sometimes get some numbness and weakness in their thigh. The more generally active you are the more the muscle soreness improves. Please do not just lay in bed.

In the early weeks, gradually increase activities. Remain on your feet for more extended periods and improve your walking distances. You may return to a sedentary job in as little as 2-3 weeks but with no bending, twisting, or lifting more than 10 pounds. Sit only in chairs with good lumbar support.

You may start a regular aerobic activity such as vigorous walking, Stairmaster, or low impact aerobic exercise classes if allowed after the first follow up appointment. This is typically within 2-3 weeks. Once you are off of any narcotic pain killers, you are free to drive from our standpoint.

From a mechanical perspective, you lose some motion with any fusion. The question becomes how your remaining levels and hip joints compensate to retain your function and everyday lifestyle. Dr. Paul's team rarely relies on braces and extensive immobilization. The instrumentation and current spinal techniques generally create enough stability to allow the bones to fuse. As a result, we allow people to move sooner after surgery. This also helps to maintain strength and flexibility in the remaining portions of your core and spine. If necessary, we typically order physical therapy after your two-week visit with Adam or Kevin. Exceptions would include fusions involving four or more levels and people with osteopenia.

LATERAL INTERBODY FUSION

6-12 WEEKS AFTER SURGERY

After the first six weeks, we typically decrease restrictions. If you were given a brace, it is typically no longer required, and we allow for more bending or twisting as required for normal everyday activities.

We will often raise the lifting restriction to 20 to 30 pounds. You may return to light duty or physical labor if pain-free and allowed by your surgeon—with minimal bending or twisting. We do not recommend returning to work if you commute more than one hour each way. You may swim after six weeks. Continue your physical therapy exercise program. You may be shown specific therapeutic exercises at your six-week visit.

The most dramatic changes will take place in the first 8-weeks post-op. Even if you experience some of your pre-op pain during this time you should not be too concerned. We follow our patients for a year post-op knowing the nerves may take a long time to heal. Most feel significantly better after the first week or two.

Travel & Transportation

You may travel by car for more than 3 hours in 2-3 weeks, but with frequent breaks. You may travel by plane in 4-weeks for trips less than 4 hours. After 6-weeks, you can resume all travel. You may drive as soon as you are off narcotic pain killers.

BRACING

The use of a lumbar brace is often used with an instrumented fusion (use of spacer implant, screws and rods). This bracing is typically for 6-weeks only, which usually aligns with the second post-op visit. The brace is to be worn anytime you are standing, sitting or walking greater than a few minutes. If you need to get up to briefly use the washroom, you may do so without the brace on. You do not need to use the brace while bathing or sleeping.

We look at the brace as serving three purposes:

- **Pain Control:** Your body is going to respond to the surgery by muscles potentially going into spasm. The brace can help with this pain.
- 2. Excessive Motion: Much like putting a cast on a broken wrist, stabilizing the bones allows the new bone growth to bridge and fuse together. Think of the phrase "A rolling stone gathers no moss". In the fusion we don't want motion and want the moss. The use of the brace limits excessive motion to allow for bone growth and a successful fusion.
- **3. Reminder:** This is probably the most important reason for using a brace. Because we have been doing our fusions in a less invasive manner, we have been finding people have been getting back to normal activities quicker than in the past. We ask that you respect the surgery. Even if you have minimal to no pain does not mean the fusion is complete. The use of the brace is a reminder for you to not overdo activity which may lead to increased pain.



LATERAL INTERBODY FUSION

CARE & RECOVERY INFORMATION

The most dramatic changes will take place in the first eight weeks after surgery. Even if you experience some of your pre-op pain during this time, you should not be too concerned. We follow our patients for a year post-op knowing the nerves may take a long time to heal. Most feel significantly better after the first week or two.

It is not uncommon to experience your post-operative pain. The nerves are still sensitive once pressure is taken off them and it may take time for them to heal.

You may not have much incisional pain after surgery because there is local anesthesia injected at the surgery time. This will wear off in the evening. We recommend using the pain medicine prescribed or muscle relaxant to avoid the potential for getting behind your pain.

It is not uncommon for patients to come out of surgery with significant improvement in their post-op pain. This does not always occur, however. The nerves can take time to heal and while they are still swollen and sensitive you may still experience pain, numbness and or weakness.

Strength can sometimes return immediately after surgery and other times it can be a full year before we know what ultimate strength recovery will be. The most dramatic gains occur in the first 2 months then the healing is slow from there.

Be careful with attempting overhead activities and keep lifting to 15lbs. close to the body.