



# laser endoscopic spine surgery

Choll Kim, M.D., Ph.D.

# A Message from Dr. Kim and Team

We welcome you to the Spine Institute of San Diego (SIOSD) family and thank you for choosing us for your upcoming surgical procedure. Our team considers patient satisfaction to be of the utmost importance and we intend to exceed your expectations during this experience. As a leader in minimally invasive spine surgery, we take pride in offering the finest and most advanced spine care available. Laser Endoscopic Spine Surgery (LESS) offers the following benefits compared to traditional open spine surgery:

- Same-day procedure
- 1 cm incision covered with a bandaid
- Less muscle and tissue damage
- Decreased blood loss
- Reduced post-operative infection rate
- Less post-operative pain
- Smaller scars
- Faster recovery time
- Quicker return to daily activities

**You are the most important member of our team and are encouraged to take an active role in preparing for your surgery and recovery.** You can make your surgical outcome safer and more successful if you are active, involved, well informed, and carefully follow your schedule and instructions.

Please take the time to carefully read this entire packet in order to understand your role in ensuring effective preparation and a smooth recovery. The enclosed information outlines the logistics of your upcoming operation, and explains what you need to do before, during, and after surgery. We highly recommend that you use this guide as a step-by-step tool throughout the entire surgery process. We also urge you to share this information with your family/friends who will be helping you prior to surgery and throughout your recovery. **Please note:** This packet is just a guide. You may be given different or additional instructions that are specific to your condition or procedure.

If you have any additional questions or concerns, please do not hesitate to contact us. We understand that undergoing a surgical procedure can be a stressful and hectic time for you and your family, and we are here to help! Once again, thank you for choosing us for your spine care.

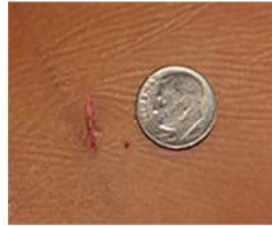
Sincerely,

Dr. Choll Kim and Team

# Laser Endoscopic Spine Surgery

## What is it?

Laser endoscopic spine surgery (LESS) is a revolutionary minimally invasive procedure that effectively treats disc herniations, radiculopathy and sciatica. The procedure utilizes an endoscope, which is an illuminated optic instrument that allows Dr. Kim to view inside the body, along with micro-instruments and laser technology. It does not require fusions, which is very different from standard open surgery.



## What are the advantages?

- A same-day procedure
- Small incision covered with bandaids
- Utilizes a state-of-the-art endoscope combined with laser and micro-instrument techniques
- Little to no recovery time

## How is the procedure performed?

Every case is different; however, in general, this surgery will proceed as follows:

### 1. Surgical Approach

- Only a tiny incision, less than 1 cm, is needed.
- Care is taken to protect the muscles, arteries and nerves surrounding the spine.
- Dr. Kim starts from the side of the back and enters the spinal canal through a natural opening of the spine, called the neuroforamen. This technique avoids unnecessary injury to the multifidus muscle.



### 2. Removal Process

- An x-ray is done to confirm that Dr. Kim is at the correct level of the spinal segment.
- Using a high-resolution endoscope, Dr. Kim can view the spine on a monitor. Dr. Kim then directs a laser and a radiofrequency probe through the endoscope to carefully vaporize disc fragments without affecting the supporting spinal structure.
- The limited amount of muscle dissection and minimal bone removal during this surgery help minimize post-op pain.

### 3. Final Steps

- Upon completion of the surgery, the instruments and surgical tubes are slowly pulled away, allowing the muscles to move back into place.
- Occasionally, a stitch or two is needed and then a small bandaid is applied over the tiny incision.



## A Patient's Experience with Laser Endoscopic Spine Surgery

*"I could not be more satisfied with the results of my surgery. I had laser endoscopic spine surgery to fix a bulging disc from an injury I sustained years ago playing football. After doing research and meeting with several surgeons, I knew I was in good hands when I met Dr. Kim. I could sense his passion for what he does right away.*

*On the day of my procedure, I was a bit nervous about the amount of pain I would have during my recovery. I had a shoulder surgery a few years prior that was extremely painful. Much to my surprise, I never felt pain at any time during my recovery. I expected to at least have pain around the incision... but nothing. In fact, I was in a considerable amount of pain walking into the surgery center and that was the last of it.*

*I remember waking up my wife the morning after surgery to tell her that I finally had no sciatic pain running down my leg. I hadn't realized how much pain I had endured over the years until it was finally gone. A day after surgery, Dr. Kim texted me to see how I was doing. This was shocking to me. I have never had a doctor personally follow up with me the day after surgery and give me a direct line to contact them should I need anything.*

*I have and will continue to recommend Dr. Kim to anyone who suffers from back or neck pain!"*

# LESS

(Laser Endoscopic Spine Surgery)

VS

# Microdiscectomy

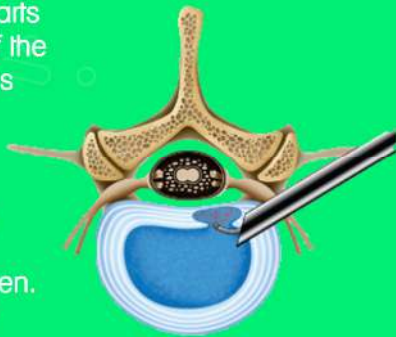
## DIAGNOSIS

- Disc herniations
- Radiculopathy
- Sciatica

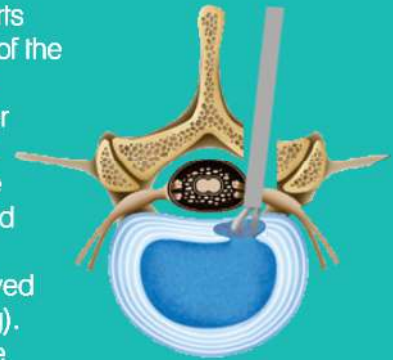
- Disc herniations
- Radiculopathy
- Sciatica

## PROCEDURE

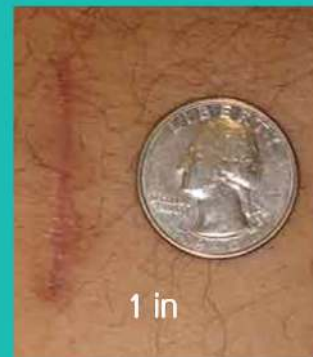
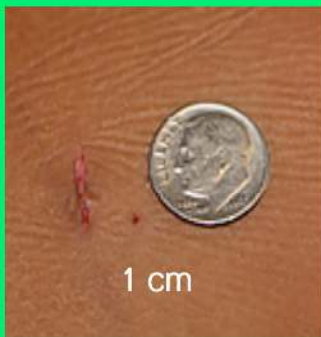
The surgeon starts from the side of the back and enters the spinal canal through a natural opening of the spine, called the neuroforamen. This technique avoids unnecessary injury to the multifidus muscle. A laser and a radiofrequency probe are directed through the endoscope to carefully vaporize disc fragments without affecting the supporting spinal structure.



The surgeon starts from the middle of the back and uses retractors to enter the spinal canal. The muscles are moved aside and a small portion of bone is removed (i.e. Laminotomy). Then forceps are used to remove disc fragments.



## INCISION



## RECOVERY

- Same-day procedure
- Start physical therapy and other activities 1-2 weeks post-surgery
- Return to work 1-2 weeks post-surgery

- Same-day procedure
- Start physical therapy and other activities 4-6 weeks post-surgery
- Return to work 4-6 weeks post-surgery

# Preparing For Surgery

*What happens next?* Adrienne, our surgery scheduler, will start coordinating your surgery with the hospital/surgery center. In the meantime, please complete your pre-op clearance tests and schedule an appointment with your primary care physician (PCP) as soon as possible.

## 1. PRE-OPERATIVE TESTING

All surgery patients are required to complete pre-op clearance tests, which include labs, radiographic studies and/or an EKG, with your PCP or at Alvarado Hospital. If you complete the tests at Alvarado Hospital, the results will be faxed to our office and to your PCP. Failure to complete the pre-op requirements during the allotted time period could cause your surgery to be delayed or cancelled.

## 2. PRE-OPERATIVE APPOINTMENT WITH YOUR PRIMARY CARE PHYSICIAN

Please schedule an appointment with your PCP as soon as possible for a medical history and physical exam. Your PCP will review the results of your pre-op tests and determine if you are healthy enough to undergo spine surgery. Please email Adrienne at [Adrienne@siosd.com](mailto:Adrienne@siosd.com) when you have scheduled this appointment to give her a better idea of when to expect the results and the medical clearance note. Also, please ask your doctor to fax a copy of your medical clearance note to our office at: (619) 265-7922. If you have other active medical problems, you may also need to obtain clearance from a specialist.

## 3. PRE-OPERATIVE APPOINTMENT WITH DR. KIM

Adrienne will contact you to choose a date for your surgery and to schedule your pre-op appointment with Dr. Kim, which will take place about 1-2 weeks prior to surgery. She will also mail and email you a letter outlining these dates, in addition to other important information. We will be sending you consent forms; please review, sign and bring these with you to your pre-op appointment with Dr. Kim. If there are any parts of the consent that you wish to discuss prior to signing, please contact our office before your pre-op appointment. During this appointment, you will go over your treatment “pathway” (also known as the “journey to recovery”) and you will be given instructions for medication(s) to take after surgery. Please email any questions or concerns to Adrienne at [Adrienne@siosd.com](mailto:Adrienne@siosd.com) ahead of time; we want to ensure that Dr. Kim answers all of your questions and addresses any concerns during this appointment.

## 4. PRE-ADMISSION APPOINTMENT

During this appointment, a nurse will verify your contact information and provide you with instructions for the morning of surgery. Please make sure to have a complete list of your allergies and medications readily available, including the dosage, how often you take it, and the reason for the medication.

- If your surgery is at the Physicians Surgery Center, your pre-admission appointment will take place over the phone. A nurse will call you about 1-2 days before your surgery.
- If your surgery is at Alvarado Hospital, Adrienne will schedule your pre-admission appointment to take place on the same day as your pre-op appointment with Dr. Kim. If there are no appointments available the same day, she will ask you to call the hospital to schedule the appointment.



# Preparing For Surgery

## MEDICATIONS

Please email a complete list of your allergies and medications (prescription and non-prescription), including the dosage, how often you take it, and the reason for the medication, to Adrienne at [Adrienne@siosd.com](mailto:Adrienne@siosd.com). Some medications can affect blood clotting and increase the risk of excessive bleeding during and after surgery. You are required to follow these instructions for your safety and to avoid cancellation of your procedure.

### **30 DAYS PRIOR TO SURGERY, DISCONTINUE:**

- Fish oil
- Omega fatty acid supplements
- Ginko
- Garlic supplements

### **7 DAYS PRIOR TO SURGERY, DISCONTINUE:**

- Aspirin
- Aleve
- Ibuprofen
- Blood thinners, such as Coumadin, Warfarin, Plavix, etc.
- Motrin
- Other non-steroidal anti-inflammatory drugs (NSAIDS), such as Mobic, Naproxen, Meloxicam, Ketorolac, Celebrex, Voltaren, Diclofenac, etc.
- Advil

### **2 DAYS PRIOR TO SURGERY, DISCONTINUE:**

- Xarelto and/or any anticoagulants. (Do not stop taking these medications without clearance from your cardiologist; you should restart Xarelto 2 days after surgery.)

### **ON THE NIGHT BEFORE SURGERY, DO NOT EAT OR DRINK AFTER MIDNIGHT.**

This includes gum and candy. If you need to brush your teeth or take medicine the morning of surgery, you may do so with just a small sip of water; but do not drink a full cup.

Tylenol/Acetaminophen, Vicodin, Percocet, Oxycodone and some other pain medications are usually *okay* to take before surgery.

Please note: If you drink alcohol every day, it is crucial that you inform Dr. Kim.

## FAMILY, FRIEND OR CAREGIVER SUPPORT

A family member, close friend or other designated caregiver will become an important member of your extended team to help you prior to surgery and throughout your recovery. Please introduce these individuals to Dr. Kim and Jennifer.

## TRANSPORTATION

Please make arrangements to have someone drive you home from the hospital, stay with you for the first few days at home, and drive you to your post-op appointment with Dr. Kim. If this is a problem, please notify our office.

# Pre-Operative Checklist

## AS SOON AS POSSIBLE

- Carefully read this entire packet.
- Schedule a pre-op appointment with your PCP.
- Email Adrienne ([Adrienne@siosd.com](mailto:Adrienne@siosd.com)) when you have scheduled your pre-op appointment with your PCP.
- Complete your pre-op clearance tests with your PCP or at Alvarado Hospital.
- Ask your PCP to fax a copy of your medical clearance note to our office at: (619) 265-7922.

## 1 MONTH PRIOR TO SURGERY

- Discontinue fish oil, ginko, omega fatty acid supplements and garlic supplements.
- If your surgery will take place at Alvarado Hospital and if Adrienne has not already done so, call the hospital to schedule a pre-admission appointment.
- Reduce alcohol consumption and try to stop smoking, or cut back on the number of cigarettes you smoke each day. (See page 13 for more information.)

## 7-14 DAYS PRIOR TO SURGERY

- Discontinue all NSAIDS and blood thinners. (Outlined on page 5)
- Begin home preparations. (For example, prepare meals that can be frozen and easily reheated, ask someone to help with child/pet care, etc.)
- Make arrangements to have someone drive you home from the hospital, stay with you for the first few days at home, and drive you to your post-op appointment with Dr. Kim.
- Email Adrienne ([Adrienne@siosd.com](mailto:Adrienne@siosd.com)) a complete list of your allergies and medications. (See page 5 for more information.)
- Email Adrienne ([Adrienne@siosd.com](mailto:Adrienne@siosd.com)) any questions or concerns that you want to address during your pre-op appointment with Dr. Kim.
- Review, sign, and bring the consent forms with you to your pre-op appointment with Dr. Kim.

## 2 DAYS PRIOR TO SURGERY

- Discontinue Xarelto and/or anti coagulants. (See page 5 for more information.)
- Finish home preparations. (For example, run any last minute errands, move frequently used items to easy to reach places, remove cords and rugs to prevent tripping, slipping or falling, etc.)

## ON THE NIGHT BEFORE SURGERY

- DO NOT EAT OR DRINK ANYTHING AFTER MIDNIGHT.

# Day of Surgery

## **BEFORE THE PROCEDURE**

- If your surgery is at the Physicians Surgery Center, please arrive 1 hour prior to your scheduled surgery. If your surgery is at Alvarado Hospital, please arrive 2 hours prior to your scheduled surgery. This will give the nursing staff enough time to prepare you for surgery and answer any of your questions.
- Remain NPO (no food and no water) as instructed.
- After checking in, you will be asked to complete any remaining admission or consent forms.
- You will then be escorted to the pre-operative holding area to be prepared for your surgery.
- You will be asked to change into a hospital gown.
- An IV line will be started and an initial set of vital signs will be taken, including your temperature, heart rate, respiratory rate and blood pressure.
- The anesthesiologist will review your anesthesia options and answer any of your questions.
- Dr. Kim will meet with you to answer any last-minute questions and exchange/verify contact information with you and your family and/or friends.

## **DURING THE PROCEDURE**

- When the surgical team is ready, you will be taken to the operating room.
- Before drifting off to sleep, you will be connected to several monitors and given oxygen to breathe; these are routine safety measures.
- The anesthesiologist will manage your vital signs and adjust your anesthetic as needed to ensure your comfort and safety throughout the entire time you are in the operating room.
- The surgical team will prepare you and place drapes to ensure a sterile environment.
- A neuromonitoring technician may apply electrodes to your arms and legs to monitor certain nerve signals intraoperatively.
- The total time required for surgery differs from patient to patient depending on the complexity of the procedure. Although every effort is made to keep surgeries on schedule, there are occasional delays that prevent us from starting on time.

## **AFTER THE PROCEDURE**

- You will be taken to a recovery area where you will remain for 1-2 hours.
- Dr. Kim will update your family and/or friends in the waiting room.
- You may feel a bit groggy from the anesthesia.
- A nurse will monitor your vital signs and check your pain level. You should tell the nurse when it hurts, where it hurts and how much it hurts on a pain scale of 0-10.
- Your nurse will let you know when you are medically ready to leave and will review the discharge instructions with you.



# After Surgery

## INCISION CARE

Wash your hands before and after caring for your incision. Your incision has medical glue that dries purple and acts like a barrier to protect your incision. Let the glue flake off over the next up to 3 weeks; do not pick at the flakes. Please cover the exposed area with a bandaid or steri strips (found over the counter at any pharmacy) to protect the incision from your clothes. To avoid infection or scarring, do not scratch or scrub the incision. After 1-2 days, remove the dressing and leave the incision open to air. Do not apply creams, lotions, or ointments to the incision for the first 6 weeks. Wear a clean, loose cotton t-shirt to keep the area dry.

Please notify us of any discharge from the wound and email a photo of your wound and dressing if this occurs to [jennifer@siosd.com](mailto:jennifer@siosd.com). Please include the time of your last dressing change in the email so we can assess the quantity of discharge and recommend appropriate wound care. If you have been prescribed antibiotics, finish the entire prescription as directed.

## MANAGING PAIN

- Change positions at least every 30-45 minutes.
- Stay active throughout the day, taking breaks when necessary.
- Take pain medication as directed and at least 30 minutes before planned activity or exercise.
- Apply a covered ice pack 2-3 times a day, for 15-20 minute intervals to help swelling or discomfort.
- Take a muscle relaxer or apply heat to control muscle spasms or cramping.
- Use relaxation techniques such as meditation, deep breathing, reading or listening to music.
- Perform simple stretches and gentle range of motion (ROM) exercises.

## MEDICATION

Some pain is to be expected as you recover. The amount and intensity of pain you may experience varies by the extent of the surgery and your tolerance to pain medications. Some patients find significant pain relief right after surgery and may only need to take Tylenol/Acetaminophen, while other patients experience a fair amount of residual pain and soreness that persists and slowly improves over time. These patients may need to take prescription pain medications for a few weeks after surgery. Be sure to take your medications as instructed and understand that some medications are to be taken only as needed. Common side effects of narcotic pain medications include constipation, nausea, drowsiness and dizziness. It is important to wean off of all narcotic pain medications and transition to Tylenol/Acetaminophen as soon as possible to prevent narcotic dependence. However, do not take narcotic pain medication and Tylenol/Acetaminophen together because the narcotic medication may already have Tylenol/Acetaminophen in it. Do not take more than 3,000 mg of Tylenol/Acetaminophen in one day. Also, do not drink alcohol or drive while you are taking pain medication. Lastly, do not take aspirin-like products or non-steroidal anti-inflammatories (NSAIDS, outlined on page 5) for 3 months after surgery, unless Dr. Kim instructs you to do otherwise.

## SITTING

Try to sit in firm chairs with armrests and good back support. When going from a sitting position to a standing position, keep your back straight, scoot to the edge of the chair, place your feet firmly on the ground and use the armrests to help push yourself up. It is important to maintain good posture and to move slowly. Avoid soft sofas and chairs with wheels.

# After Surgery

## **WALKING**

The single most important thing you can do to regain your strength and speed your recovery is to walk. Walking strengthens your back and leg muscles, increases your endurance and relieves stress. Instead of taking one long walk, you should take several short walks throughout the day, and gradually increase the distance and frequency of your walks. Be sure to wear comfortable clothing and low-heeled footwear with traction. You should also develop a regular walking routine and make it a habit for the rest of your life in order to maintain a healthy spine. Make sure to utilize proper body mechanics and use your pain and discomfort as a guide for most activities. If you experience increased pain for more than two hours after an activity, you've done too much too soon. When you feel pain, slow down and pay more attention to your posture and movements.

## **PRECAUTIONS**

Avoid lifting more than 10 pounds for 4 weeks after surgery (a gallon of milk weighs about 9 pounds). When lifting, use proper body mechanics, try to only lift objects that can be easily lifted with one hand, and do not lift above your elbows. Do not participate in sports or activities that require frequent or strenuous bending, twisting, pushing or pulling (such as gardening, mowing the lawn, etc.) for about 4-5 weeks after surgery. When bending, try to use your knees rather than your waist, but you should try to bend and twist gently to avoid stiffness. Also, try to avoid climbing full flights of stairs until you are steady on your feet, and have enough strength and balance to do so safely. You should have help going up and down the stairs for the first few attempts. Start with one step at a time and use the railings. Listen to your body and be mindful of your limits.

## **MOBILITY**

You may walk around without restriction, but be aware that your muscles are weaker after spine surgery and you may be more susceptible to falls. You should change positions throughout the day to help control pain, prevent blood clots and improve circulation. It is helpful to sit for a while, lie down for a while and take short walks periodically throughout the day. You should gradually increase your activity level and rest as needed. You should also perform gentle stretches and exercises on a consistent basis in order to increase flexibility, strengthen muscles and maintain an active lifestyle. Use common sense in regards to activity. Do not push yourself to the point of fatigue or pain – moderation is the key.

## **SLEEPING**

You may sleep in any position you find comfortable. You should try sleeping on your back with a pillow under your knees, or on your side with a pillow between your knees and a pillow behind your body slightly tucked under your back and hips. To maintain good posture, avoid using more than two pillows under your head and try to keep your back straight.

## **NUTRITION**

A healthy, well-balanced diet will help strengthen your immune system, give you energy, increase your tolerance to activity, and help your incision heal. Be sure to increase fluid intake to six, 8 oz. glasses of water each day, and eat fresh fruits and vegetables high in fiber. This will help the common constipation caused by pain medication and inactivity. To treat constipation, you may consider taking a gentle laxative, such as Dulcolax, and a simple over-the-counter stool softener, such as Colace. Dr. Kim may have already prescribed these medicines to you.

# After Surgery

## **PHYSICAL THERAPY**

Your motivation and participation in physical therapy are essential elements of your recovery; you must play an active role in every step of your rehabilitation. You will receive a prescription for physical therapy at your first post-operative appointment with Dr. Kim. Outpatient physical therapy usually starts 1-2 weeks after surgery and continues for about 6 weeks. The goal is to establish and optimize an individualized home/gym exercise program that can be continued on a consistent basis. This program will focus on improving functional mobility, core strengthening, non-impact aerobic exercises, coordination and balance, proper body mechanics, and overall conditioning. As your physical therapy sessions draw to an end, the transition to your home/gym program should be seamless. Your dedication to physical therapy and exercise will set the pace for your recovery.

## **SWIMMING**

You may start a pool exercise program, go swimming, take baths and go in hot tubs around 4 weeks after your surgery. Please be sure to wait until your incision has completely healed before submerging it in water. If you are unsure, please email or text a picture of your incision to our office or Dr. Kim.

## **GOLFING**

Around 3-4 weeks after surgery, you can begin chipping and putting. If chipping and putting are not painful, you may move to the driving range. Start with short-irons, move to mid-irons, and then to long-irons and clubs, as long as you are not experiencing pain at each level.

## **SEXUAL ACTIVITY**

Most patients wait to resume intercourse for about 1-2 weeks. You should situate yourself in a position that supports and takes pressure off the lumbar region. You can achieve this by lying flat on your back, placing a small pillow or hand towel under your low back, and placing a pillow under your knees to make them slightly bent. The bottom or missionary position is usually the safest and most comfortable; however, use your pain and discomfort as a guide.

## **DRIVING**

Driving will depend on the extent of your surgery and your recovery progress. Your pain must be managed so that you no longer need any narcotic pain medication, such as Percocet, Oxycodone, Vicodin, etc. These medications can affect your ability to drive. Generally, many patients can start driving after 1-2 weeks, but you should consult Dr. Kim. Try to limit initial driving to short, local distances.

## **SHOWERING/BATHING**

You may shower with the dressing. The dressing should be removed 2-3 days after your surgery and you may continue to shower with the incision uncovered. Let the soapy water run over the incision freely, but afterwards, make sure to dab dry it with a towel. It is important that you do not submerge the incision site in water, including bathtubs, pools and hot tubs, for at least 4 weeks after surgery.

# After Surgery

## **POST-OPERATIVE APPOINTMENTS**

You will also follow-up with Dr. Kim or Jennifer periodically throughout the next year to ensure that you are continuing to heal appropriately. When Adrienne schedules your pre-op appointment with Dr. Kim and the date of your surgery, she also saves you a post-op appointment with Dr. Kim about 1-2 weeks after surgery. During this appointment, Dr. Kim will discuss your medication regimen, examine your incision, and assess your muscle and nerve function. You will likely receive a prescription to start physical therapy and you will schedule your future post-op appointments. Patients with active medical problems should schedule a follow-up appointment with their PCP about 4 weeks after surgery.

## **RETURN TO WORK**

This will depend on the extent of your surgery, your recovery process and the specific requirements of your job. If you have a relatively sedentary job and can comfortably sit, you may resume working around 1-2 weeks after surgery. If your job is physically demanding, and you are able to perform controlled exercises and lift weights, you may return to work around 4 weeks after surgery; however, more time may be needed. Dr. Kim recommends returning to work on a part-time basis with limited duties before returning to full-time work without any restrictions. If you need to take time off work, please contact your employer for FMLA forms. For more information about FMLA, visit: [www.dol.gov/whd/fmla/](http://www.dol.gov/whd/fmla/)

## **WHEN TO CALL OUR OFFICE**

If you experience any of the following symptoms:

- Persistent, severe or uncontrollable pain
- Weakness or numbness in your extremities
- Redness, drainage, or increased swelling from your incision
- Difficulty breathing
- Problems controlling your bladder or bowel
- No bowel movement for 2-3 days

# Recovery Guidelines

## **1-2 WEEKS AFTER SURGERY**

- Take several short walks and perform posture exercises throughout the day.
- Do not lift more than 10 pounds.
- Drink six, 8 oz. glasses of water day, and eat fresh fruits and vegetables high in fiber.
- Wean off of all narcotic pain medications and transition to Tylenol/Acetaminophen.
- If you are no longer taking any narcotic pain medication, you can start driving.
- Do not participate in sports or activities that require frequent or strenuous bending, twisting, pushing or pulling.
- Start physical therapy.
- You can resume intercourse, as tolerated.
- Limit initial car rides and flights to short distances (around 1-2 hours).
- If you have a relatively sedentary job, you can likely return to work.

## **3-4 WEEKS AFTER SURGERY**

- Do not lift more than 15-20 pounds.
- You can submerge your incision in water, such as pools, bathtubs and hot tubs.
- You can perform light chores, such as cooking, dusting, sweeping or folding laundry.
- You can participate in non-contact sports and activities such as yoga, hiking or swimming.
- You can go on longer car rides and flights.
- If your job is physically demanding, you can likely return to work.

## **5-6 WEEKS AFTER SURGERY**

- Do not lift more than 25-30 pounds.
- Gradually increase activities as tolerated by pain.
- You can perform household chores, such as gardening and mowing the lawn, as tolerated by pain.
- You can participate in more non-contact sports and activities such as running or tennis.
- You can start taking frequent or long distant flights.

## **3 MONTHS AFTER SURGERY**

- You can participate in contact sports, ride a road bicycle, and go downhill skiing, snowmobiling, waterskiing, or horseback riding, as tolerated by pain.

# Frequently Asked Questions

**Q:** What if I'm not ready to proceed with surgery?

**A:** You should never feel pressured to proceed with surgery. If you are unsure, we encourage you to review our educational materials, get a second opinion, speak to one or more of our previous surgery patients, or talk with your family and friends.

**Q:** What can I do before my surgery to help with my recovery? (See page 6 for more information)

**A:** Dr. Kim recommends maintaining a healthy diet and getting a sufficient amount of sleep each night to strengthen your immune system. You should continue to perform simple stretches and exercises that increase flexibility and strengthen muscles. Keeping your muscles toned and endurance high will help you recover faster after surgery. Therefore, stay as active as possible before your surgery and continue your daily activities. Also, try to reduce alcohol consumption and try to stop smoking, or cut back on the number of cigarettes you smoke each day.

**Q:** Why should I quit smoking prior to surgery?

**A:** You should try to stop smoking, or cut back on the number of cigarettes you smoke each day, in order to minimize the risk of infection and help your wound heal. Smoking disrupts the normal function of the body's system, decreases blood flow to healing tissues, limits bone growth and accelerates arthritic changes. Stopping even for a short period of time will be helpful.

**Q:** When will I come back to see Dr. Kim or Jennifer? (See page 11 for more information)

**A:** You will follow-up with Dr. Kim or Jennifer periodically throughout the next year to ensure that you are continuing to heal appropriately. Your first post-op appointment is normally 1-2 weeks after surgery.

**Q:** When will I be able to return to my normal activities? (See page 12 for more information)

**A:** Dr. Kim utilizes minimally invasive techniques during spine surgery, which results in a smaller incision and less muscle and tissue damage. This is why you can expect to experience less post-operative pain, a shorter hospital stay, a faster recovery time, and an earlier return to work and daily activities than is associated with traditional open back surgery. Nonetheless, it is still surgery. While most procedures successfully relieve pain and improve function, recovery does take time. Returning to your normal activities will be a slow process. Each surgery is different, and the healing and recovery time will vary.

**Q:** When will I be able to travel? (See page 12 for more information)

**A:** You may travel as soon as you feel comfortable, but Dr. Kim recommends avoiding long distance travel for at least 1-2 weeks. During these first few weeks, try to only take short car rides that are 1 hour or less. If you need to take a long care ride, you should stop at least once an hour to stretch and walk around.



# Patient Stories



**Kevin H.**

**Age:** 29 years old

**Occupation:** Firefighter

**Diagnosis:** Left L5-S1 herniated disc

**Symptoms:** Persistent low back pain and numbness of his thighs and legs.

**Procedure:** Left L5-S1 Laser Endoscopic Spine Surgery (LESS)

*"I consulted with Dr. Choll Kim after injuring myself on duty. I had extreme low back pain and pain going down both my legs. After completing months of physical therapy, Dr. Kim suggested his Laser Endoscopic Spine Surgery. It has been 1 month since surgery and I feel amazing; my back pain is gone and the pain in my legs has significantly decreased. I am looking forward to being back to work as a Firefighter very soon. Dr. Kim was polite, professional, and extremely knowledgeable. I would strongly recommend that anyone with significant back pain visit him."*



**Sharon A.**

**Age:** 75 years old

**Occupation:** Writer

**Diagnosis:** Left L3-4, L4-5, L5-S1 stenosis

**Symptoms:** Stabbing pain in the low back, buttocks, and left leg, and numbness in the foot and toes.

**Procedure:** Left L3-4, L4-5, L5-S1 Laser Endoscopic Spine Surgery (LESS)

*"After researching a lot of different options, I decided Dr. Choll Kim was the best surgeon for my back and leg problems. He came with great reviews and was a teacher of the type of surgery I was about to try. I traveled to San Diego from the Seattle area for the surgery and after a few hours I was back in my hospital room a little drowsy but in no pain. The next morning, I had no pain and felt better than I had in years. It's been four years now and I am active doing yoga, biking, walking and recently returned from a trip to Australia where I hiked and snorkeled in the Great Barrier Reef. I had great confidence in Dr. Kim and his skills and wonderful attitude surpassed anything I could ask for in a physician."*



**Mark S.**

**Age:** 51 years old

**Occupation:** Carpenter

**Diagnosis:** Right L4-L5 bulging disc and L4-5, L5-S1 stenosis

**Symptoms:** Right hip pain and numbness in the right ankle, right heel and right toes.

**Procedure:** Right L4-5, L5-S1 Laser Endoscopic Spine Surgery (LESS)

*"I arrived to Dr. Kim's office in severe pain due to an injury that made it difficult for me to walk without limping. Since my laser back surgery, I'm now walking without a limp and have no more pain in my lower back. I now feel like a new person. I would like to share with any of Dr. Kim's patients who are considering this procedure that I have the utmost confidence in Dr. Kim and his ability to perform this surgery and recommend to any/all of his patients to make the choice and do the surgery! I want to thank Dr. Kim for performing the surgery and to tell him, he has CHANGED MY LIFE!"*