A PATIENT'S GUIDE TO SPINE SURGERY

KERN SINGH, MD
OUTPATIENT SPINE SURGEON

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The thought of having spine surgery can be a stressful process.

Our goal is to help you feel comfortable and informed.

With this booklet, you can begin preparing for the experience and putting your mind at ease.

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KERN SINGH, MD
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A MESSAGE FROM DR. SINGH, M.D.

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Providing advanced, compassionate, and tailored care is our team's top priority. To help us deliver the highest standard of care, I request the following from my patients:

- Take an active role in your recovery by familiarizing yourself to the resources available, such as this booklet and our website (www.outpatient-spine-surgeon.com).

- The success of your recovery is directly influenced by the effort you invest in the process. By staying informed, you can set realistic expectations and be fully prepared for your journey to healing.

- We're here for you whenever you need us. If you have an urgent need, concern, or question, don't hesitate to reach out. Our contact number (312-432-2373) is prominently listed in this booklet to ensure you can access it easily.

- Pace yourself for a smoother recovery. Healing takes time, and it's important not to rush the process, especially in the first few weeks after surgery. Prioritize rest and allow your body to heal at its own pace. Once you're fully recovered, you'll be ready to dive back into the activities you love with no restrictions.

Thank you for entrusting us with your care.

Sincerely,

Kern Singh, M.D.

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OUTPATIENT SPINE SURGEON

SURGICAL LOCATIONS

Kern Singh, MD

Minimally Invasive and Endoscopic Outpatient Spine Surgeon

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Rush University Medical Center
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South Suburban Surgical Suites
9200 Calumet Ave., Suite E-100, Munster, IN 46321

Rush Oakbrook Surgery Center
2011 York Rd., Suite 3000, Oak Brook, IL 60523

PREOPERATIVE SURGICAL INSTRUCTIONS

7-10 Days Before Surgery:

- Stop taking medications included on the attached list. Please consult the physician who ordered them prior to stopping the medication.

When to Call the Doctor?

- Please call Dr. Singh's office if your health status changes, you develop symptoms such as fever, cough, sore throat, or flu-like symptoms prior to surgery.
- Temperature above 101.5 degrees Fahrenheit.
- 312-432-2373

Day Before Surgery:

- If you have not been called by the preoperative team by 4 p.m. the day before your surgery, please call us at (312) 432-2373.
- Our office will be able to confirm your arrival and surgical times.
- Leave valuables at home.

Smoking / Tobacco Cessation

- Nicotine prevents bone from healing.
- New bone growth following surgery is very important for patients undergoing spinal fusions.
- Patients who smoke, or use nicotine products, also have a higher risk of developing an infection after surgery.

MEDICATIONS TO AVOID BEFORE SURGERY

- Advil
- Aleve
- Alka Seltzer
- Alcohol
- Anacin
- Anaprox
- Ansaid
- Arthrotec
- Aspirin
- APC
- BC Tablets or Powder
- BC Cold Powder
- Brufen
- Bufferin
- Cama Arthritis Pain Reliever
- Cataflam
- Celebrex
- Cephalgesics
- Clinoril
- Cogesprin
- Coricidin
- Coumadin
- Darvon
- Darvon with Aspirin
- Daypro
- Diclofenac
- Diflunisal
- Disalcid Tablets or Capsules
- Doan's Regular and Extra Strength
- Dolobid
- Dristan
- Duradyne Tablets
- Easprin
- Ecotrin
- Empirin
- Enbrel
- Equagesic Tablets
- Etodolac
- Excedrin
- Feldene
- 4 Way Cold Tablets Goody's Headache Powder or Tablets
- Fiorinal
- Flurbiprofen Sodium
- Ibuprofen
- Indomethacin
- Indocin
- Ketoprofen
- Lodine
- Meclomen
- Medipren
- Meloxicam
- Midol 200
- Midol PMS caplets
- Mobic
- Motrin
- Nabumetone
- Naprelan
- Naprosyn
- Naproxen
- Norgestic Forte
- Orudis
- Oruvail
- Oxaprozin
- Pepto Bismol Tablets and Liquid
- Percodan
- Persantine
- Piroxicam
- Plavix (Warfarin)
- Relafen
- Robaxisal
- Rufen
- Sine Aid
- Soma Compound
- Sulindac
- Trandate
- Trental
- Trilisate
- Vanquish
- Vitamin E
- Voltaren
- Wesprin
- Zavtrin
- Zoprin
- Herbal Supplements

WHAT TO EXPECT: SURGERY CHECKLIST

Night Before Surgery:

- Shower either the night before or the morning of surgery with antibacterial soap.
- Change your bed linens so that they are clean when you return home.
- Eat a normal dinner.
- Do NOT drink alcohol.
- Do NOT eat or drink anything after midnight unless otherwise instructed by your doctor.

Packing for the Hospital:

- Comfortable, loose-fitting clothes. Socks and shoes that are easy to put on.
- Please bring your dentures and their case – your family will need to keep these.
- Please bring your CPAP mask if you use one at home (bring your settings).
- Please bring your glasses and hearing aids if applicable.
- Please bring your medication list including dosage and frequency.
- Please bring your insurance card and ID.
- Please bring your cell phone and charger.

Morning of Surgery:

- Your doctor will advise you which medications you should and should not take the day of surgery.
- Do NOT chew gum or suck on hard candy.

Do NOT Bring:

- Cash
- Jewelry
- Valuables
- Medications

DAY OF SURGERY INSTRUCTIONS

Day of Surgery:

- Your doctor will advise you which medications you should and should not take the day of surgery.
- Do NOT chew gum or suck on hard candy.
- Friends and family may wait in the lounge.
- Dr. Singh or the PAs will speak to the family after surgery is complete.
- The PAs or nurses will review post-operative instructions before discharge.

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WHAT TO EXPECT: PAIN MANAGEMENT

Postoperative Pain

- Our goal is to reduce your pain so that you can work with physical and occupational therapy and regain your mobility and independence.
- Postoperative pain is different from your preoperative pain and can be related to your incision, swelling, and muscle tension.
- Muscular pain and pain related to swelling can be relieved by early walking, gentle range-of-motion exercises, applying heat or cold packs, and/or taking muscle relaxers.

Narcotic Medications

- We use a highly sophisticated minimal narcotic anesthesia protocol developed by our team.
- The MMA (Multi-Modal Analgesia) protocol is a combination of pain medications that work together to provide greater pain relief than narcotics alone while limiting side effects.

Narcotic Side Effects

Constipation:

- Take scheduled stool softeners such as Colace as long as you are taking pain medicine.
- Drink plenty of water.
- Eat high fiber fruits and vegetables.

Shallow breathing:

- Use your Incentive Spirometer as instructed by your nurse to prevent pneumonia.

Nausea:

- Take oral medications with food.
- Eat bland foods at rest and avoid spicy or heavy foods.

Itching:

- Medications like Benadryl can help relieve itching. If this doesn't work, we may need to adjust your medications.

Sleepiness:

- If you become too drowsy with pain medications, we will need to adjust the amount of medication you are taking.

NOTE: *We typically avoid Ibuprofen or other nonsteroidal, anti-inflammatory medications (NSAIDs) because they may increase bleeding and can prevent bone fusion from occurring.*

WHAT TO EXPECT: PAIN MANAGEMENT

Please note that medications are ordered on an individual basis and not everyone will be prescribed all types of medications. These may include:

- Muscle relaxers such as Flexeril, Zanaflex, or Valium.
- Medications for nerve pain such as Lyrica or Neurontin. If you were on these before surgery, we may slowly decrease your dose after surgery.
- Tylenol or Acetaminophen. You should not take more than 3,000 mg of Acetaminophen per day.

Other treatments that can treat pain and help you cope with your discomfort:

- Repositioning and early ambulation can help prevent muscle spasms.
- Ice can help decrease postoperative swelling and should be used for 20 minutes on and 20 minutes off.
- Relaxation techniques such as deep breathing, meditation, and imagery can be helpful.
- You may also experience a sore throat following surgery. Drinking water and using throat lozenges may help with this.
- Distraction techniques such as listening to music or watching TV can help take your mind off of your pain.

NOTE: *We typically avoid Ibuprofen or other nonsteroidal, anti-inflammatory medications (NSAIDs) because they may increase bleeding and can prevent bone fusion from occurring.*

WHAT TO EXPECT:
AFTER THE SURGERY

Early Walking/Mobilization:

- Unless otherwise instructed by your doctor, you will be walking the day of your surgery.
- Walking is important to prevent blood clots and pneumonia.

Bowel Function:

- Many patients experience constipation after spine surgery and when taking narcotics.
- It is very important to drink plenty of fluids, take stool softeners and laxatives as needed, eat plenty of fruits and vegetables, and to get out of bed as soon as you can.
- To prevent constipation, stool softeners, such as Colace or Senokot, may be taken twice daily. Miralax may also be added as needed once daily.

General Rules:

- Walking is encouraged daily and climb stairs as needed.
- 10 pound lifting limit until seen inour office for follow-up.
- You may sleep on your back/side; whatever is most comfortable for you.
- Do NOT drive while on pain medication or muscle relaxants.
- No sexual activity for 2 weeks.
- No driving for 2 weeks.
- Physical therapy will be arranged at the first follow–up appointment.
- Swallowing difficulty after neck surgery is normal.
- No neck or back brace is needed.
- Smoking is discouraged even after surgery because it prevents healing.

INCISION SITE CARE SECTION

When Should I Call My Doctor?

- The sterile dressing placed during surgery should remain in place for the first 3 days following surgery and should not get wet.
- Can take sponge baths for the first 3 days but no soaking the incision (bathing or showering).
- 3 days after surgery, the sterile dressing may be removed and you may shower with the incision site uncovered if the incision is draining please covered it with a new dressing/bandage daily.
- Once the incision is dry, you may leave uncovered and stop daily dressing changes.
- NO ointments, creams, lotions, etc. are to be applied to the incision site unless otherwise directed by a provider.
- NO submerging the incision underwater (i.e. bath, pool, hot tub, etc.) for 6 weeks following surgery. NO EXCEPTIONS.
- No sauna or steam room for 6 weeks following surgery

FREQUENTLY ASKED QUESTIONS

Will I Set Off Metal Detectors?

- Most patients do not have a problem with this. Very occasionally, when the security wand is waved over the location of hardware, an alarm may result. Then the surgical scar will have to be shown.

When Can I Return To Work?

- This is very individualized to you and the type of work you do. Discuss this with your surgeon. In general, most patients require some time off work depending on the type of surgery and the amount of lifting required with the job.

When Will I Begin Outpatient Physical Therapy After Surgery?

- The best activity for your back is walking both before and after surgery. As you heal, your surgeon will order physical therapy after surgery.

How Long Before I Can Travel?

- Traveling will depend on your ability to sit for an extended period of time and how much movement is required in your travel plans. We encourage you to not sit longer than two hours at a time without getting up and moving around.

When Should I Call My Doctor?

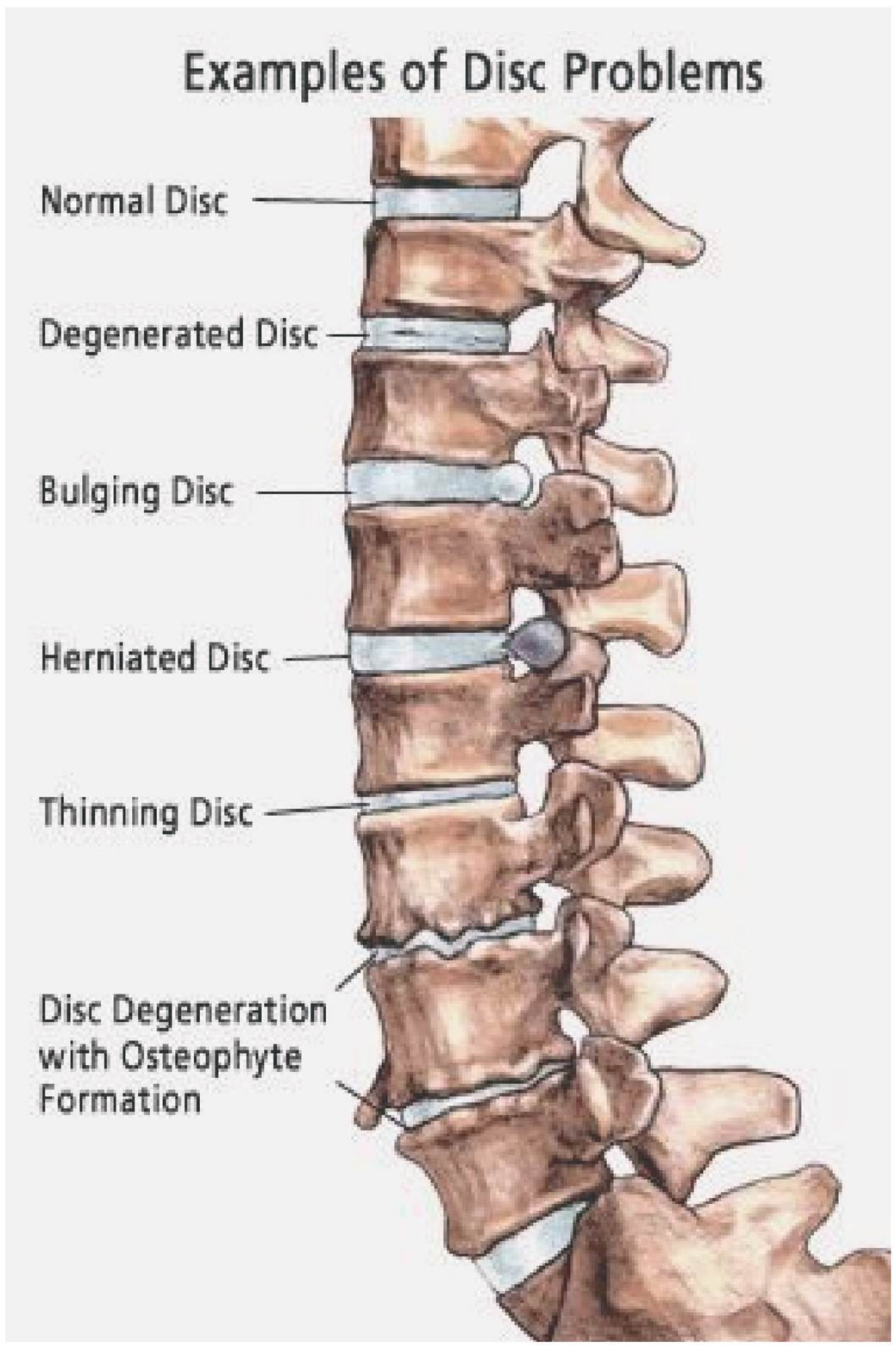
- Temperature above 101.5 degrees Fahrenheit.
- Clear or excessive drainage from the incision.
- Intractable pain not controlled with post-operative medications.
- Difficulty urinating or having bowel movements.

Please call us BEFORE going to any Emergency Room. We can help expedite care.

COMMON CAUSES OF NECK AND BACK PROBLEMS

CAUSES OF BACK AND SPINE AILMENTS

- Poor posture
- Poor body mechanics
- Obesity
- Genetics
- Smoking
- Diabetes
- Trauma



Degenerative Disc Disease (DDD):

- This condition occurs when the disc wears down from either the natural process of aging or from injury to the back.

Herniated Disc:

- This happens when the center of the disc ruptures and bulges through the outside of the disc.
- This can cause pressure on the nearby nerve root and spinal nerve to produce pain, numbness, and tingling.

Spinal Stenosis:

- Narrowing of the spinal canal (bone spurs) which can put pressure on the spinal nerves or compress the spinal cord itself, causing weakness, numbness, and/or pain.

Radiculopathy:

- Compression or pinching of the nerve root causing pain, numbness, and weakness in the arms or legs.

Spondylolisthesis:

- Degeneration or trauma to the joints of the spine causing the vertebrae to slip forward resulting in pinched nerves that cause pain.

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COMMON SURGICAL PROCEDURES

Endoscopic Microdiscectomy:

- A state-of-the art surgery performed by very few spine surgeons for cervical (neck) and lumbar (low back) bulging discs where a portion of the disc that is causing pressure on nerves is removed.
- A pen-tip (10mm) incision is made in the neck or back, a tubular trocar is inserted, and a camera is inserted.

Microdiscectomy:

- The removal of a portion of the disc which is causing pressure on the nerves and/or spinal cord.
- This procedure can be thought of as shaving down the bulging disc.

Microscopic Laminectomy:

- A surgical procedure where bone spurs are removed in order to expand the opening of the spinal canal.
- This procedure will relieve pressure on the nerves and spinal cord caused by spinal stenosis.
- This is often done in conjunction with a microdiscectomy.

Microscopic Anterior Cervical Diskectomy and Fusion (ACDF):

- The most common cervical fusion surgery where the entire disc is removed (discectomy) and stabilized with a fusion.
- The incision is made in the front of the neck.

Microscopic Cervical Total Disc Replacement (TDR):

- This is the same procedure as the ACDF except a synthetic disc is placed into the neck avoiding the need for a fusion.

Microscopic Posterior Cervical Laminoplasty:

- A surgical procedure to treat multiple level spinal stenosis causing spinal cord compression.
- This procedure is motion preserving and does not require a fusion.
- The incision is made on the back of the neck.

Minimally Invasive Lumbar Fusion

- A surgical procedure to make two or more of the bones in the spinal column (vertebrae) grow together (fuse) into one solid bone.
- This procedure can be done minimally invasively from the side (XLIF), the front (ALIF) or the back (TLIF) of the lumbar spine.

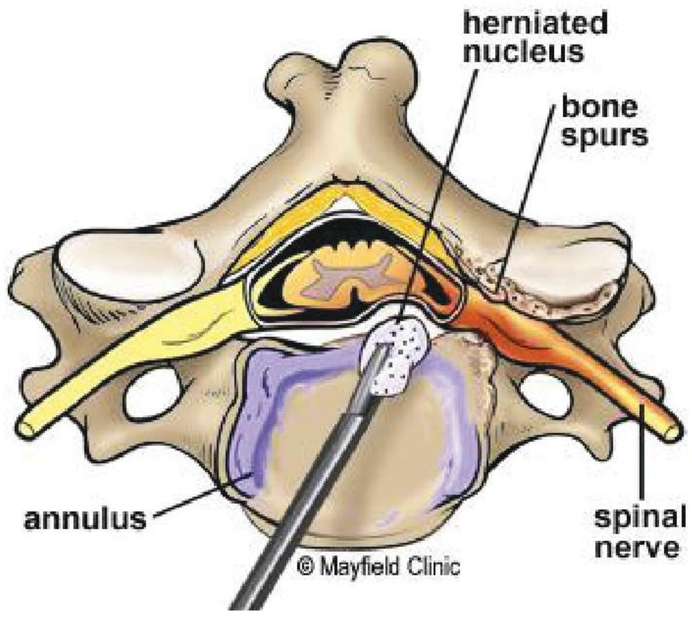
PROCEDURE SPECIFIC INFORMATION

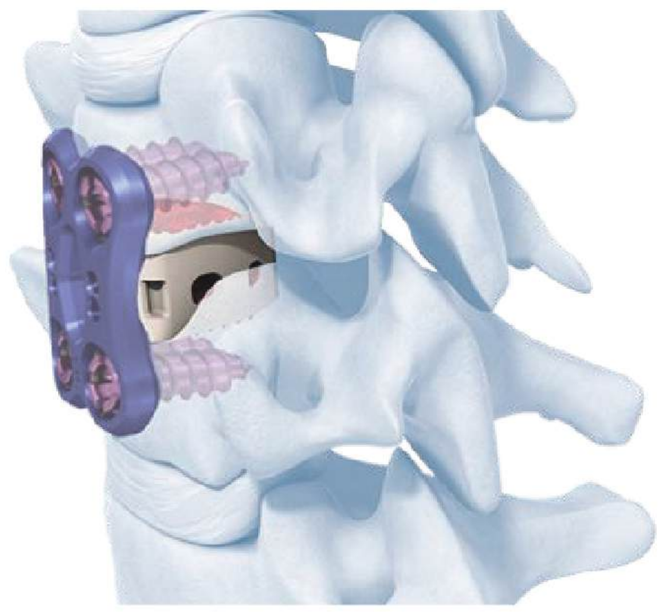
What are Common Procedures Dr. Singh Performs?

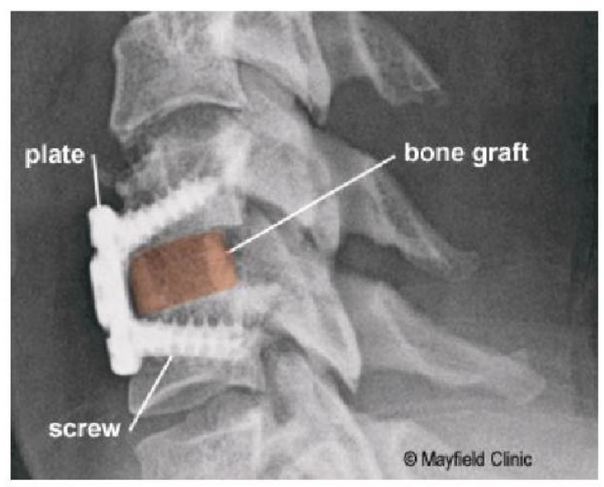
- Anterior Cervical Discectomy and Fusion (ACDF)
- Artificial Cervical Disc Replacement
- Cervical Laminoplasty
- Microscopic Lumbar Laminectomy/Diskectomy
- Endoscopic Lumbar Laminectomy/Diskectomy
- Transforaminal Lumbar Interbody Fusion (TLIF)
- Lateral Lumbar Interbody Fusion (LLIF)
- Anterior Lumbar Interbody Fusion (ALIF)

ANTERIOR CERVICAL DISCECTOMY AND FUSION (ACDF)

- The disc is removed completely (discectomy) and stabilized.
- You will lie on your back during the procedure.
- A one-inch incision will be made in the front of your neck.
- The degenerated (worn out) disc will be removed along with any bone spurs.
- The disc space will be replaced with a small spacer that will be filled with bone graft.
- A small plate and screws will be used to secure the spacer into place.

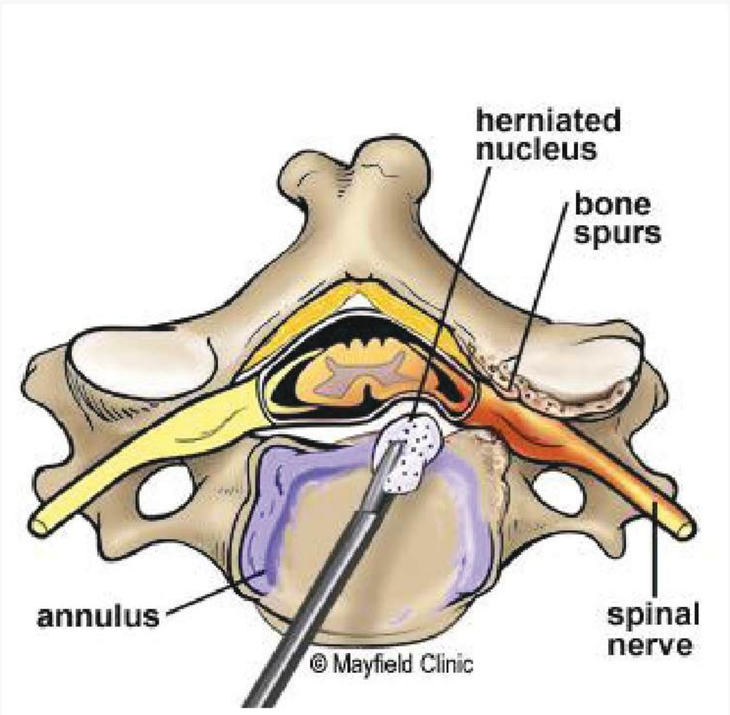


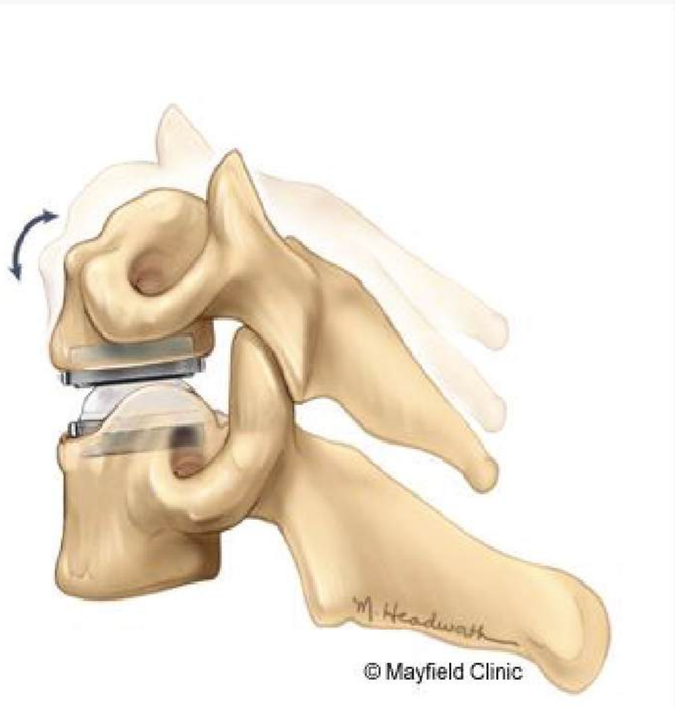




ARTIFICIAL CERVICAL DISC REPLACEMENT

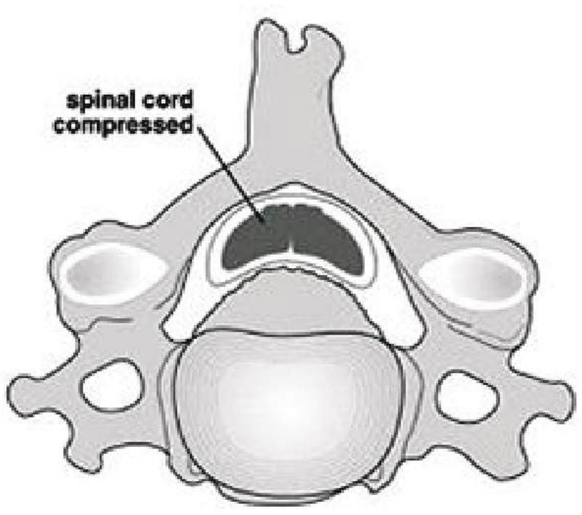
- The disc is removed (discectomy) and stabilized with an artificial disc that preserves motion of the spine.
- You will lie on your back during the procedure.
- A one-inch incision will be made in the front of your neck.
- The degenerated (worn out) disc will be removed along with any bone spurs.
- An artificial disc will be inserted into the disc space.

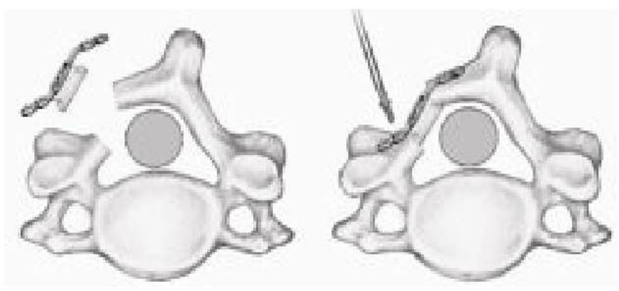


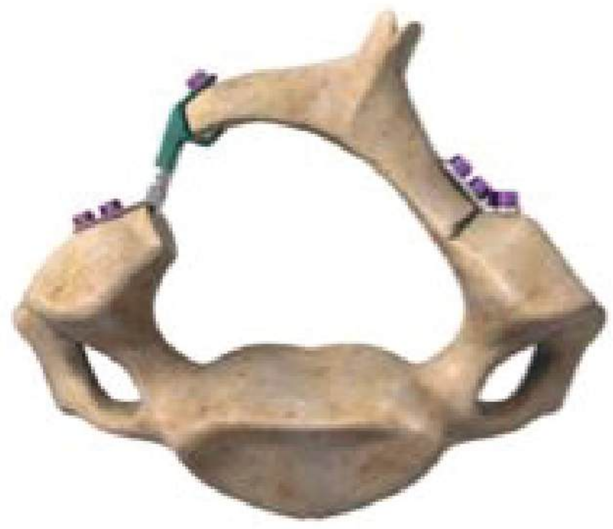


CERVICAL LAMINOPLASTY

- This procedure relieves pressure placed on the spinal cord (spinal stenosis) by opening the lamina (pointed bone).
- You will lie on your stomach during the procedure.
- A small incision will be made in the back of your neck preserving all of your neck muscles.
- Small plates and screws will be placed to hold the open lamina together allowing you to move your neck without the need for a fusion.

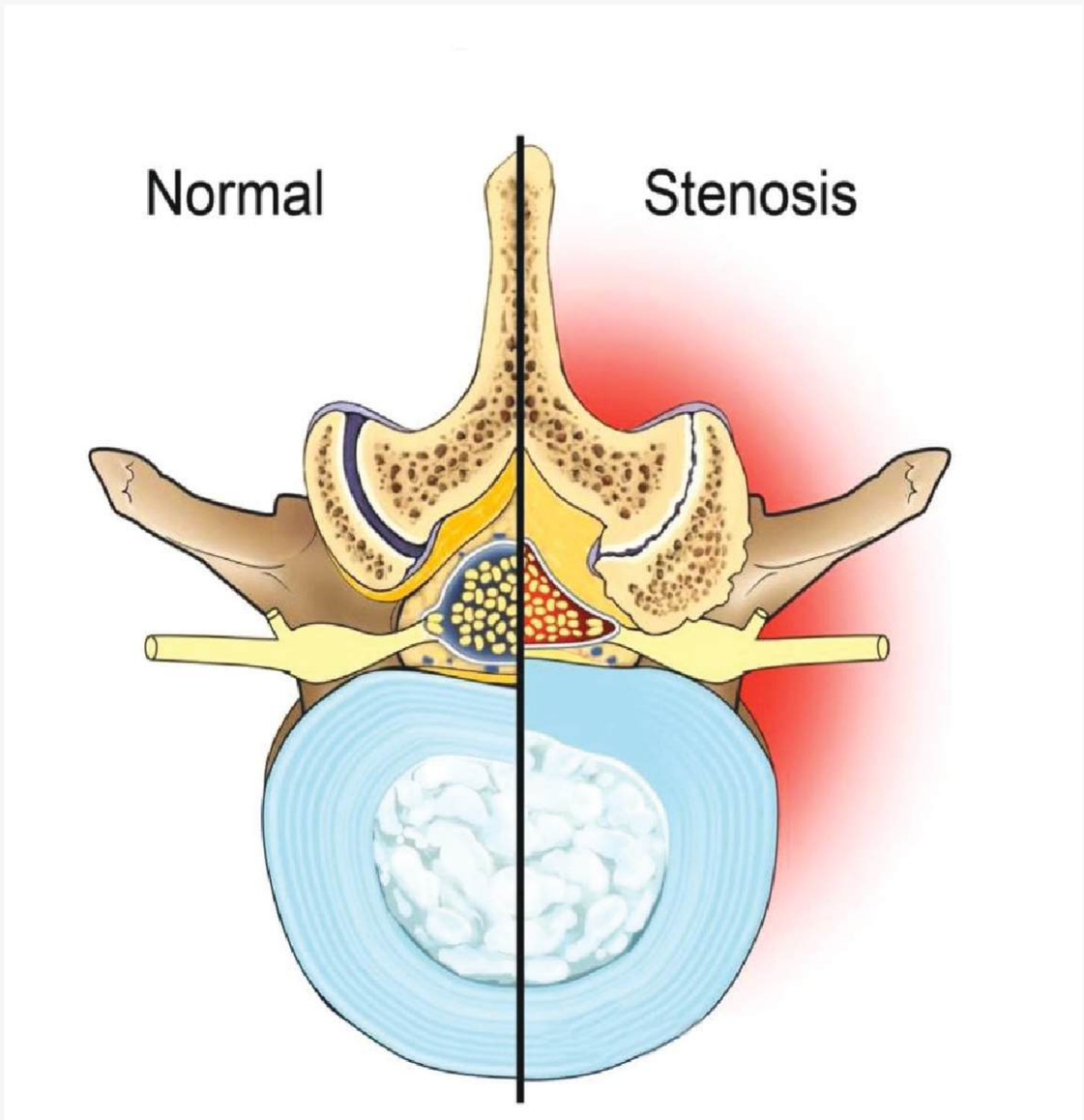


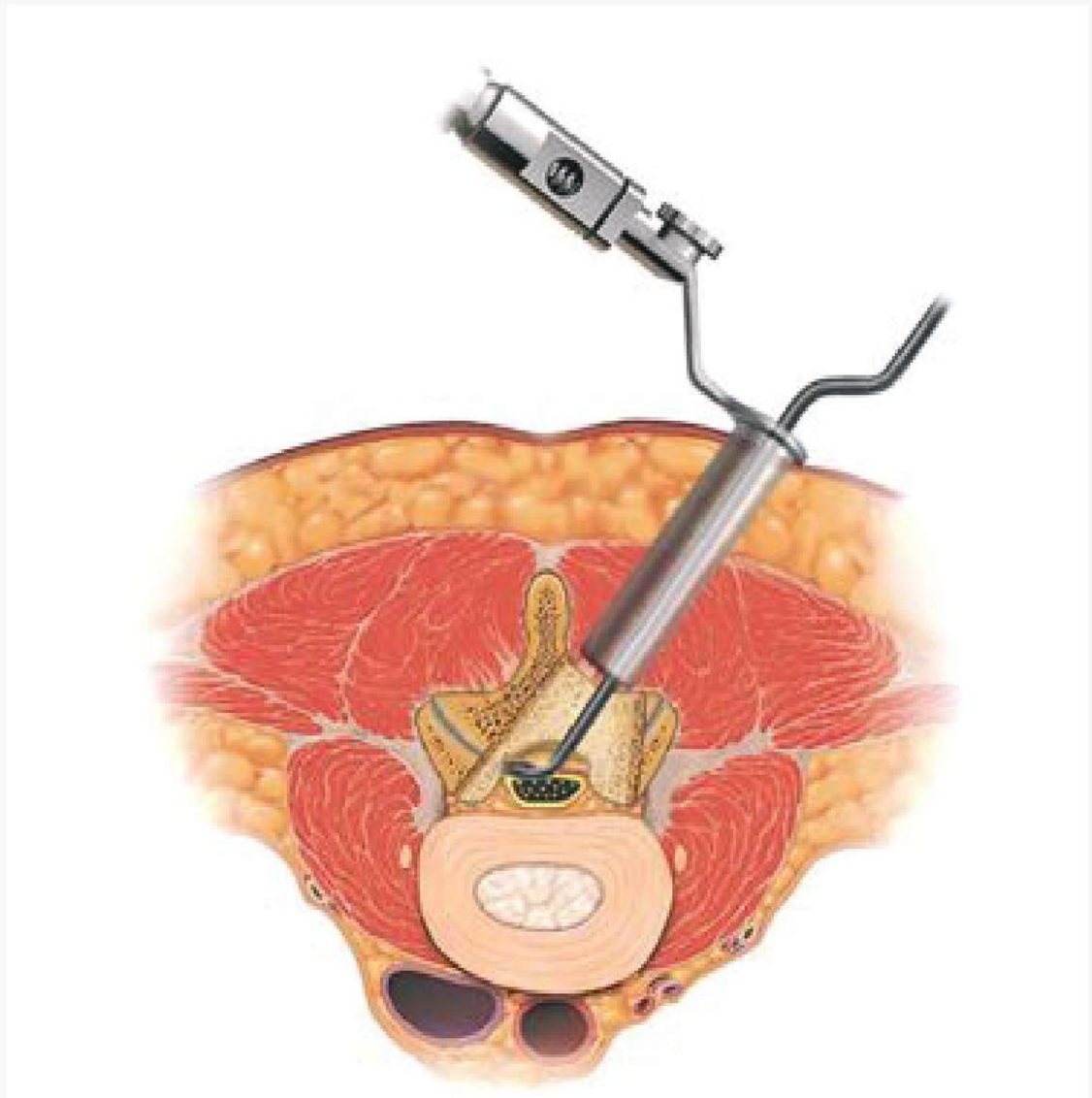




MICROSCOPIC LUMBAR LAMINECTOMY / DISKECTOMY

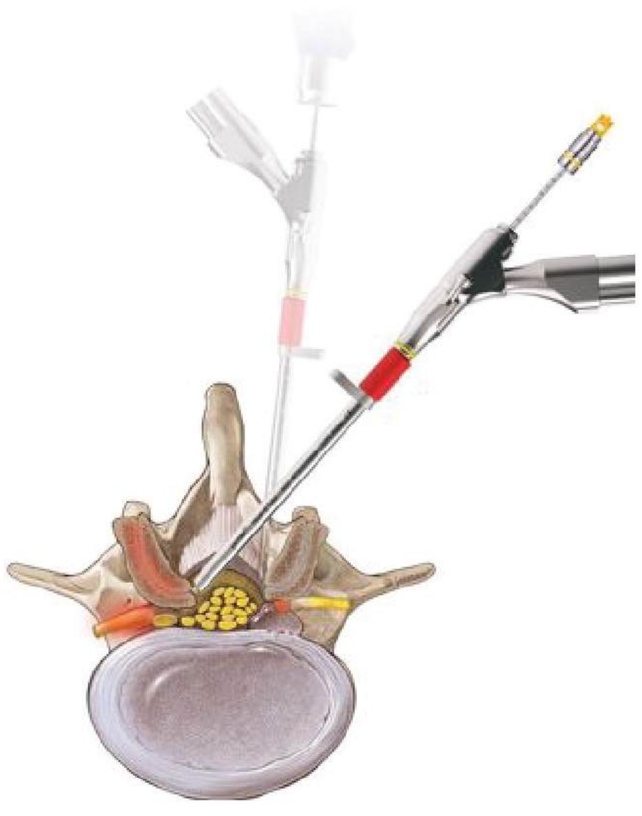
- A surgical procedure in which the surgeon removes the bulging disc and any bone spurs causing pressure on the nerves and/or spinal cord without the need for a fusion.
- You will lie on your stomach during the procedure.
- A small incision will be made in your lower back.
- A tubular retractor will be placed along with a microscope.

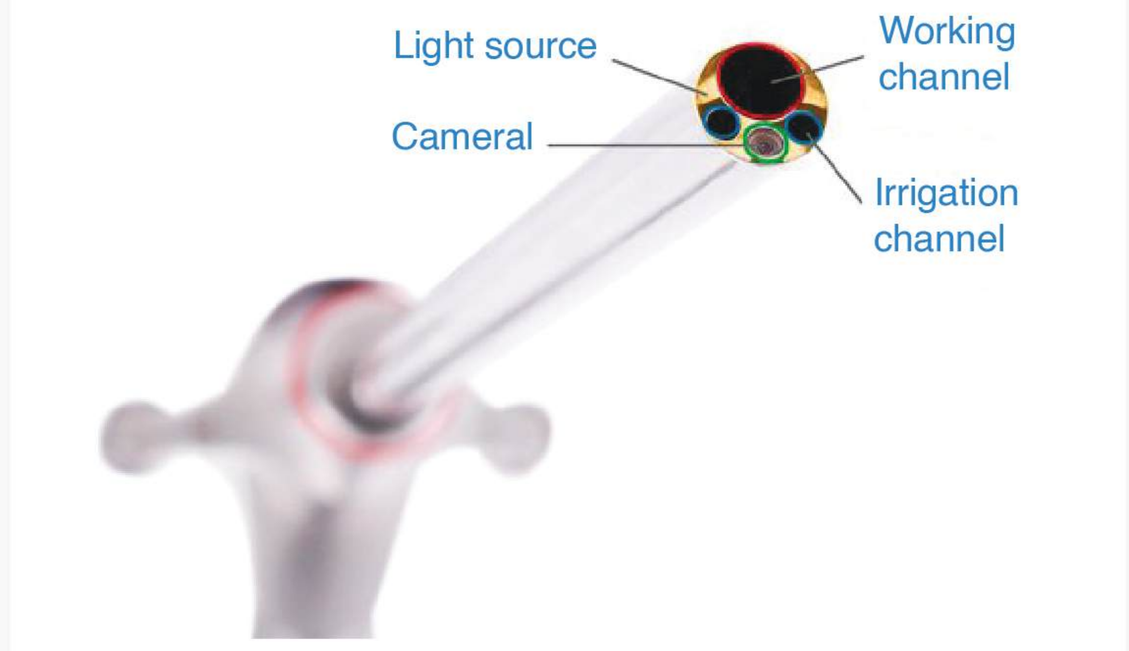




ENDOSCOPIC LUMBAR LAMINECTOMY / DISKECTOMY

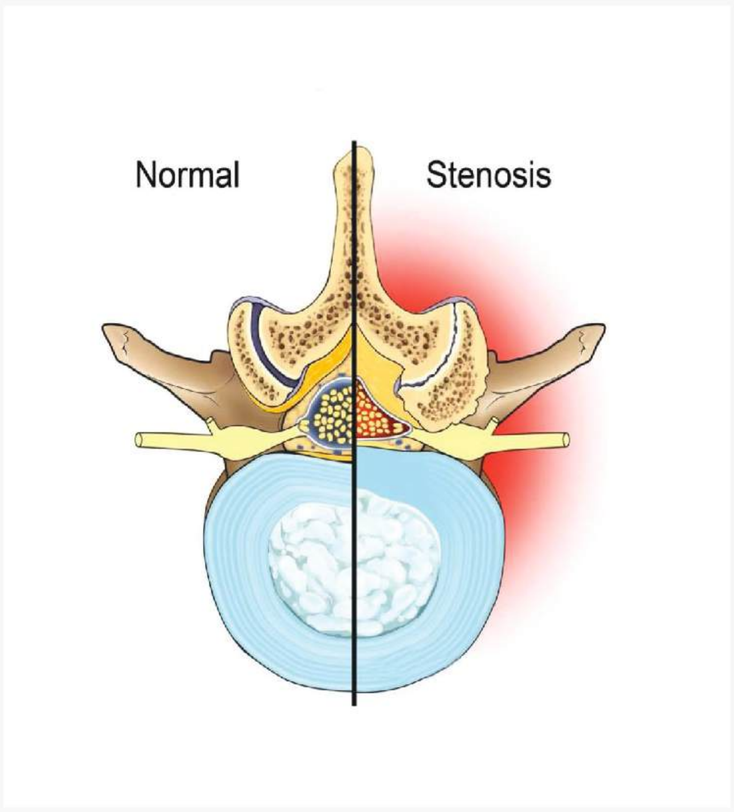
- A state-of-the-art surgery performed by very few spine surgeons specifically trained that can be used for a variety of conditions such as disc herniation, or spinal stenosis.
- You will lie on your stomach so the surgeon can access your lower back.
- 1 or 2-10 mm skin incisions the size of a (pen-tip).
- A tubular trocar is inserted.
- A camera is inserted which projects the operative site onto a monitor for the surgeon.
- Immediate recovery.

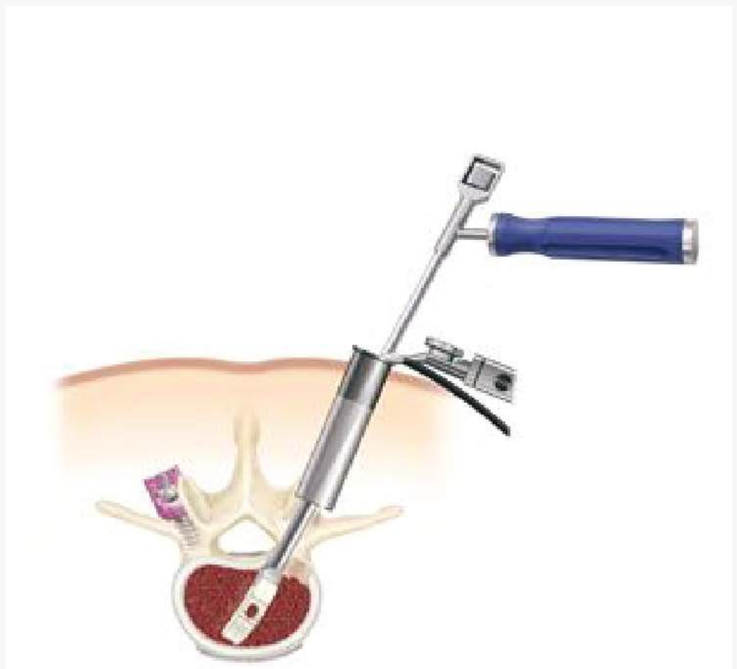


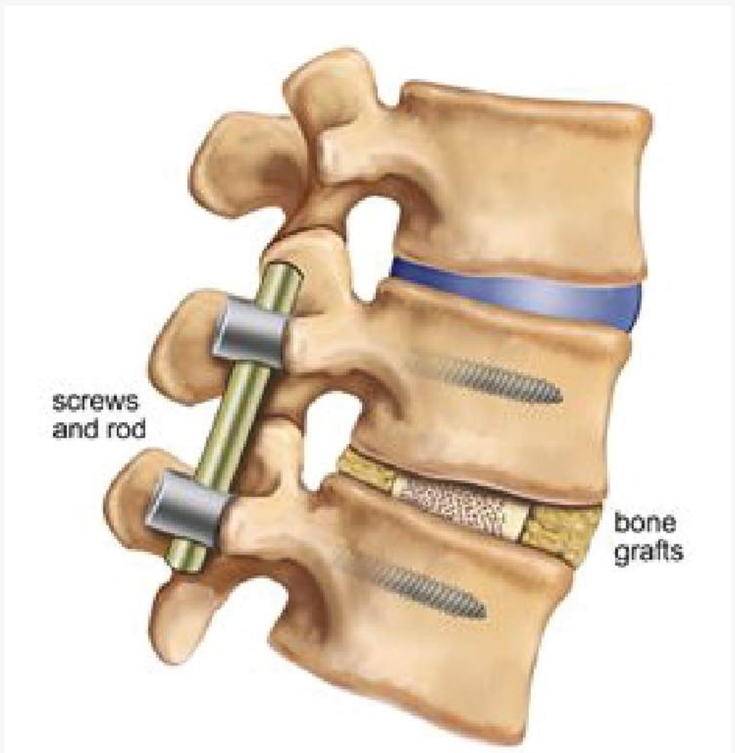


TRANSFORAMINAL LUMBAR INTERBODY FUSION (TLIF)

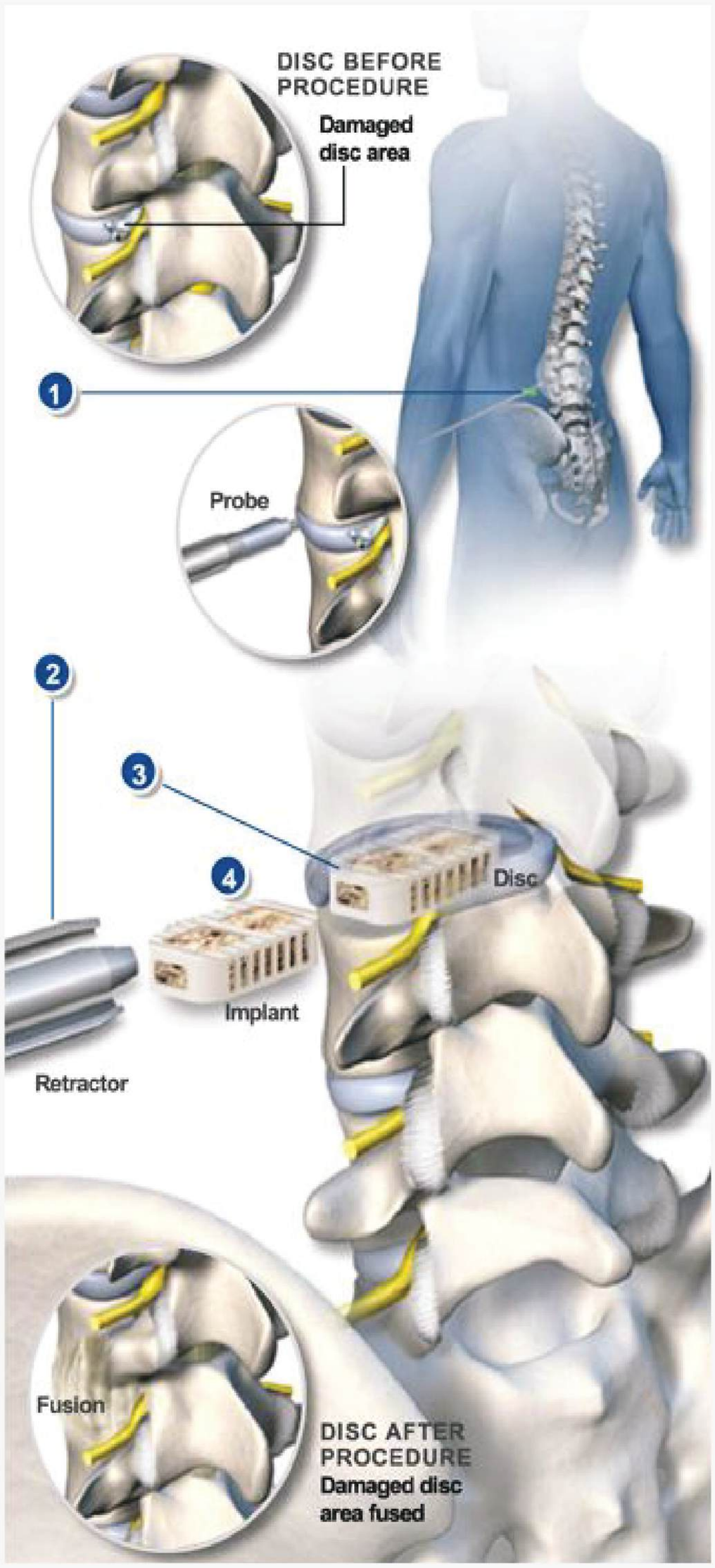
- A surgical procedure to make two or more bones in the spinal column (vertebrae) grow together (fuse) into one solid bone, relieving pressure on the nerves and spinal cord.
- You will lie on your stomach during the procedure.
- Small incisions will be made in your lower back with no muscle cutting.
- A tubular retractor will be placed.
- A laminectomy (removal of the bone spurs) and discectomy (removal of disc bulge) are performed to relieve pressure on the spinal cord.
- A small spacer is placed in the disc space and filled with bone graft. The space also helps with alignment.
- Screws and rods are placed in the back of the spine for support.







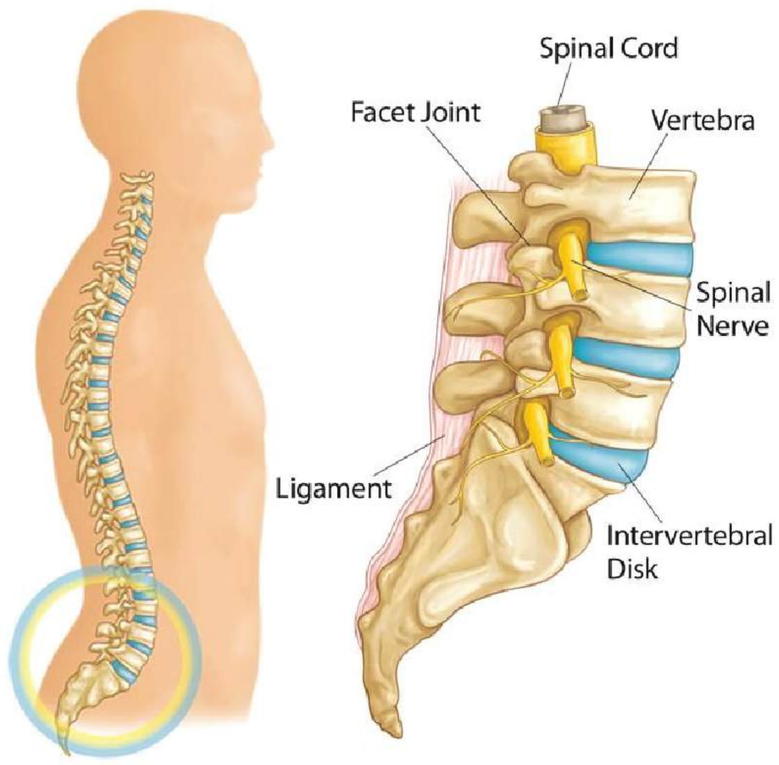
LATERAL LUMBAR INTERBODY FUSION (LLIF)

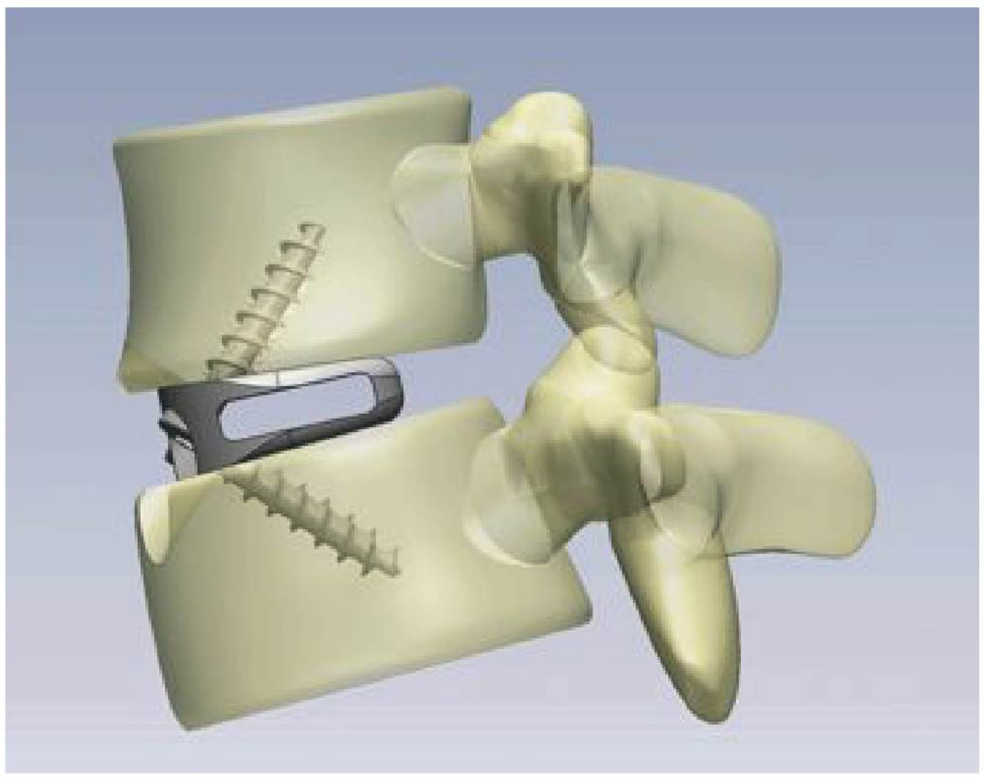


- A surgical procedure to make two or more bones in the spinal column (vertebrae) grow together (fuse) into one solid bone, relieving pressure on the nerves and spinal cord.
- You will lie on your side during the procedure.
- A small incision will be made on your side with no muscle cutting.
- The degenerative (worn out) disc will be removed along with any bone spurs.
- The disc space will be replaced with a small spacer that will be filled with bone graft.

ANTERIOR LUMBAR INTERBODY FUSION (ALIF)

- A surgical procedure to make two or more of the bones in the spinal column (vertebrae) grow together (fuse) into one solid bone, relieving pressure on the nerves and spinal cord.
- You will lie on your back during the procedure.
- A small incision will be made in your lower abdomen (C-Section) with the help of a General Surgeon.
- The degenerative (worn out) disc will be removed along with any bone spurs.
- The disc space will be replaced with a disc spacer that will be filled with bone graft.





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