

***Consent for Lumbar Spine Surgery and Fusion***  
***at*** \_\_\_\_\_

Patient Name: \_\_\_\_\_

***Patient Diagnosis:***

- Lumbar Spinal Stenosis** (Narrowing of the canal where the spinal cord and nerves are located)
- Lumbar Degenerative Disc Disease** (Wear and tear on the discs that has accumulated over the years)
- Lumbar Disc Herniation** (Rupture of the disc)
- Lumbar Spondylosis** (Bony spurs)
- Lumbar Radiculopathy** (Pressure on the nerves from the discs and/or spurs causing buttocks, leg, or foot symptoms)
- Lumbar Foraminal Stenosis** (narrowing of the openings on the side of the spine where the nerves exit the spine, causing pressure on the nerves)
- Lumbar Spondylolisthesis** (Weakness of the spinal joints and ligaments causing spinal bones to abnormally slide or be malpositioned)
- Cauda Equina Syndrome** (Damage to the spinal cord from spurs, discs, or stenosis that causes the legs, bowel, or bladder to malfunction)
- Sciatica** (Pinching of the nerve from the back into the leg)
- Low Back Pain**
- Spondylolysis** (A combination of hereditary and mechanical factors that cause an incomplete “ring” formation of the vertebrae, resulting in slipping of the vertebrae)
- Lumbar Degenerative Joint Disease** (wear and tear on the joints that has accumulated over the years)

### ***The Procedure***

Lumbar spine surgery is typically performed to relieve pain, numbness, and weakness in the legs, hips, and sometimes in the lower-back region, and to help decrease the possibility that these symptoms will worsen, causing increased difficulty with walking, shrinking of the muscle, bowel, or bladder dysfunction.

### ***I understand that my surgeon will perform the following type(s) of surgery:***

- **Decompressive Lumbar Laminectomy** - This procedure is performed to relieve the symptoms associated with spinal stenosis, a condition that is a by-product of aging and may be marked by degenerative and/or herniated discs, thickened ligaments, and the overgrowth of bone (spurs) in the lumbar spinal canal. During surgery, the overgrown bone and thickened ligaments, as well as any protruding disc material that is causing pressure on the spinal canal and nerve roots, is removed through an incision in the lower back. In addition, the nerve openings on the side of the spine are enlarged to allow adequate room for the nerve to exit into the legs.
- **Fusion** - Bone fragments, either from the back of the hip or with bone from the laminectomy, will be taken and used to fuse the spinal bones together. These fragments will be placed alongside of the spinal bones, and possibly in between the vertebrae in the disc space if the disc is removed. Often bone morphogenic protein (BMP), a “synthetic” version of a naturally occurring body protein that helps bone fuse, is used.
- **Instrumentation** - Screws and rods (either metal or plastic) will be used to hold the spinal bones together and help the bones heal. These screws and rods are made to be left in permanently. “Cages” may be used to hold the bone in place in the disc space and help fuse the spine.

### ***Alternatives***

I may consider the following non-surgical alternatives to lumbar spine surgery and fusion, which include:

- Not having the procedure, with the expectation that my symptoms will get better by themselves
- Using medication for the relief of pain or muscle spasms (pain pills, muscle relaxers, anti-inflammatory pills)
- Lumbar Traction Therapy (disc decompression)
- Performing exercises to strengthen the back muscles
- Undergoing physical therapy that may include deep heat and massage, ultrasound, and/or traction
- Steroid injections around the nerves to reduce swelling and inflammation in hopes of relieving symptoms
- Acupuncture
- Mind-body medicine

- Chiropractic treatments
- Lifestyle modification
- Nutritional modification/supplements
- Hypnosis
- Interactive guided imagery

***Risks of non-surgical options include, but are not limited to:***

- Continued pain that may worsen and is not relieved with medications or other treatments
- Possible worsening of the numbness or tingling which can become permanent
- Possible worsening of the weakness which can become permanent
- Possible atrophy (shrinkage of the muscles) which may become permanent
- Allergic or other adverse reactions to the steroid injections or medications
- Nerve damage, spinal cord damage, or paralysis from the steroid injections
- Nerve damage from continued, prolonged pressure on the nerves
- Prolonged or worsening of the pressure on the nerves and/or spinal cord resulting in paralysis
- Difficulty/incoordination with walking as a result of pressure on the spinal cord/nerves
- Bowel/bladder dysfunction as a result of pressure on the spinal cord/nerves
- Nerve or spinal cord damage as a result of an accident, because of the narrowing of the nerve channels

The benefits and disadvantages of these alternative methods have been explained to me, if requested.

***Risks of Lumbar Spine Surgery and Fusion***

I agree that the decision to have this procedure includes weighing the risks of surgery as well as the benefits. I understand and accept that the possible risks and complications may include, but are not limited to the following:

- **Adverse reaction to anesthesia** - Both local and general anesthesia involve risk. There is a possibility of a complication, injury or death from all forms of anesthesia and sedation.
- **Arachnoiditis** – A scarring of the nerves in the back which occurs in a small percentage of patients for unknown reasons.
- **Bleeding** – It is possible, though unusual, to experience an episode of bleeding, which may be excessive, during or after surgery. Bleeding may require additional treatments, surgery or transfusion of blood or blood products. Certain medications, such as aspirin, anti-inflammatory drugs or blood thinners (Plavix or Coumadin) may increase the risk of bleeding.

- **Blood clot development** - Blood clots may occur with any type of surgery. Clots can cause complications including pain, swelling, inflammation, tissue damage, and/or compression of the spinal cord.
- **Blood vessel damage** - Damage to the aorta or iliac artery/vein can occur.
- **Cardiac complications** - There is a small chance that having the procedure could cause an irregular heartbeat or a heart attack.
- **Continued degeneration of the discs/spine** - As time passes after surgery, there will be further degeneration and wear-and-tear at other discs above and below the level(s) of surgery, that is in part a consequence of the naturally occurring wear-and-tear that may have led to the present surgery, and also in part to the added stress on these other levels due to the fusion.
- **Death** - Although the risk is remote, death may occur during or soon after any surgical procedure.
- **Decreased motion of the back** – The patient may have less motion or more stiffness of the lower-back after surgery.
- **Failure of the instrumentation** - Breakage or dislodgement of the screws, rods, or cages can occur, which may necessitate another surgery to correct the breakage.
- **Failure of the vertebrae to fuse** - The vertebrae may not fuse, which may lead to spinal deformity and/or pain, requiring further surgery.
- **Failure of the procedure** - There is a chance that undergoing lumbar spine surgery will not alleviate the patient's pain, numbness, weakness or other symptoms.
- **Increased pain** - It's possible, though unlikely, that pain or other symptoms will increase in severity following the procedure.
- **Infection** - Infection may occur in the wound, either near the surface or deep within the tissues, and may include the spine, possibly resulting in worsening of pain or paralysis, requiring treatment with antibiotics and/or possible future surgery.
- **Nerve root injury** - Injury to the nerve roots may result in weakness in the leg, paralysis in the affected muscle group, or loss of sensation, increased numbness or tingling in the affected area.
- **Paralysis** - There is a very rare complication of this surgery which may result in temporary or permanent paralysis of the patient's legs that is complete or partial, temporary or permanent.
- **Recurrence** - There is a chance the pain, numbness, weakness or other symptoms in the lower-back/leg region will recur and require additional surgery.
- **Respiratory difficulties** - Breathing difficulties (which are usually temporary) or post-operative pneumonia may occur as a result of surgery. Pulmonary embolus (blockage of an artery in the lungs) could occur from the blood clotting in the veins of the legs or abdomen.

- **Scar formation** - Scar tissue forms as a part of the natural healing process after any surgery or injury. In rare circumstances, some patients can form excessive amounts of scar tissue that can be a source of pain.
- **Spinal cord injury** - There is a slight risk of injury to the spinal cord during this procedure, which may result in paralysis, weakness, numbness, or loss of bowel and/or bladder function.
- **Spur recurrence** – If a fusion is not performed and spurs were present before the surgery, the spurs are likely to recur. Fusion will, in most circumstances, prevent this from occurring.
- **Stroke** - Though unlikely, there is a possibility that a stroke may occur during the surgical procedure or recovery period.

***Additional risks related to fusion with internal fixation***

I understand that if my surgeon performs a fusion or uses internal fixation (metal/plastic screws, rods, cages) to stabilize the spine, I must also accept the following risks:

*(risk groups that apply will be checked by Dr. Marano)*

***Risks related to fusion***

In the fusion procedure, a section of bone or bone graft may be taken from the hip (autograft) and used to fuse the open space between the vertebrae. Risks include:

- Nerve damage to the back of the hip
- Changes or difficulty in walking
- Failure of the fusion (the bone graft may not form a solid fusion), requiring another surgery
- Extrusion of the bone graft, which may occur if the bone graft moves out of position
- Persistent pain at the graft site

If a bone bank graft (allograft) or synthetic bone substitute are used for the fusion procedure, risks include:

- A greater chance that the bone fusion will fail, as compared to using the patient’s own bone
- A very rare chance of hepatitis or other diseases being passed from the donor bone (bone bank bone) to the patient

If bone morphogenic protein is used, risks include:

- Possible adverse/allergic reactions
- Increased swelling/inflammation in the tissues surrounding the graft site
- Formation of “too much” bone, which may lead to symptoms of a pinched nerve

**Risks related to internal fixation**

If rods and screws are used to further strengthen the bond, additional risks may include:

- Loosening, movement or breakage of the screws/rods, which may necessitate another surgery
- Positioning of the screws may cause injury to the surrounding structures.
- Rare allergic reactions to the metal in the rods and screws, which would necessitate removal of the rods and screws

**Important Points**

**Allergies/Medications** - I have informed the doctor of all my known medication allergies. I have also informed my doctor of all the medications I am currently taking, including prescription drugs, over-the-counter medications, herbal/homeopathic therapies, nutritional supplements, illicit drugs, and alcohol. I understand the advice I have been given about using any or all of these medications and drugs before or after the procedure.

**Smoking** - It has been explained to me that if I smoke before or after my surgery, I may be impeding my own recovery. I understand that if I smoke, I will have a greater risk of wound healing, complications in general, blood clots in the legs or lungs, pneumonia, and poor/incomplete bone healing, which may necessitate further surgery.

**Relief of symptoms** - How much pain relief I will have and how quickly it will occur after surgery are impossible to predict. Often, patients will awaken from surgery with their pain gone. Other times, it may take weeks or months to fade away. Some patients are left with pain or numbness that does not completely go away.

**Lifestyle changes** - It will be necessary to make significant changes in my lifestyle and work. Regular exercise (i.e. walking) should become a routine. Taking great care with and minimizing bending, twisting, and lifting is important. I must realize that certain activities may no longer be easy for me to do or may cause pain or re-injury to my spine.

I am aware and accept that no guarantees about the results of the procedure have been made. I recognize that unforeseen conditions may require my surgeon and his associates/assistants to perform different or additional procedure(s) than what has been described above.

**Reaffirmation of Consent**

I authorize and direct Stephen R. Marano, M.D. and his associates/assistants to perform

**Lumbar Spine Surgery** with:

- Fusion**
- Instrumentation**
- Bone Morphogenic Protein**

I understand that this procedure is intended to help relieve pain, numbness, and/or weakness that may be associated with compressed nerves (Spinal Stenosis).

I affirm that my surgeon has explained all of the information above, that I understand this information, and that all of my questions regarding this procedure have been answered. I certify that I understand the proposed surgical treatment and that I am satisfied with the explanation I have received.

I therefore consent to the Lumbar Spine Surgery and to whatever different or additional operations or procedures my surgeon deems necessary or advisable during the course of the procedure.

I consent to the administration of anesthesia by the hospital's anesthesia team. They will explain the anesthetic procedure, risks, and possible complications to me separately.

**Disposal of Tissue** - Tissue removed from the body may be used to confirm or to make a medical diagnosis and will be sent to the pathologist and/or laboratory for diagnosis. I consent to the disposal of any tissue, medical devices, or body parts that may be removed during the procedure, according to hospital policy.

**Photography/Observers** - I give my consent to the photographing or videotaping of the procedure to be performed, including appropriate portions of my body, for scientific, medical, or educational purposes, provided that the pictures do not reveal my identity. Also, in the interest of advancing medical education, I agree do NOT agree to allow qualified observers into the operating room during the procedure.

**Blood transfusion** - I do do NOT consent to the transfusion of blood or blood products as deemed necessary by either my doctor or the anesthesia team.

The risks include, but are not limited to:

- Chills
- Fever
- Itching
- Allergic reactions
- Breakdown of red blood cells
- Exposure to diseases such as AIDS, Hepatitis, or others.

The above risks exist despite careful testing of blood and blood products. Under some conditions, I may donate my own blood prior to surgery for my use only. Not receiving blood or blood products may endanger my recovery, possibly leading to serious health consequences or even death.

**All blanks on this form were filled in prior to my signature. I have read and understand the content of this form, and I have received a copy of this entire Consent For Lumbar Spine Surgery and Fusion, if requested.**

\_\_\_\_\_  
Signature of Patient or Legal Representative/Date

\_\_\_\_\_  
Relationship (Self, Parent, Legal Guardian, etc.)

\_\_\_\_\_  
Print Name of Patient or Legal Representative/Date

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Witness Signature/Date