

***Consent for Anterior Cervical Discectomy
With Fusion and a Metal Plate***

at _____

Patient Name: _____

Patient Diagnosis:

- Cervical Degenerative Disc Disease** (wear and tear on the disc(s) which has accumulated over the years)
- Cervical Degenerative Joint Disease** (wear and tear on the joints which has accumulated over the years)
- Cervical Disc Herniation** (rupture of the disc)
- Cervical Spondylosis** (bony spurs)
- Cervical Radiculopathy** (pressure on the nerves from the discs and/or spurs causing neck, should, arm, or hand symptoms)
- Cervical Central Canal Stenosis** (narrowing of the channel for the spinal cord, causing pressure on or indenting the spinal cord)
- Cervical Foraminal Stenosis** (narrowing of the openings on the sides of the spine where the nerves exit the spine and go to the shoulders and arms, causing pressure on the nerves)
- Cervical Spondylolisthesis** (weakness of the spinal joints and ligaments causing the spinal bones to slide abnormally or become malpositioned)
- Cervical Myelopathy** (damage to the spinal cord from spurs, discs, or stenosis which causes the arms, legs, bowel, and/or bladder to malfunction)
- Cervicalgia** (neck pain)

The Procedure

Anterior Cervical Discectomy is typically performed to relieve pain, numbness, and/or weakness that may be associated with cervical disc disease, spurs, and/or pressure on the nerves and/or spinal cord. Discs are small masses of rubbery tissue that act as natural shock absorbers between the individual bones of the spine. The pressure on the nerve/spinal cord may be caused when a disc ruptures (herniates), causing the softer substance in the center of the disc to bulge through its tough, fibrous outer ring. Bone spurs (overgrowths of bone), which sometimes develop around the degenerated discs and may cause additional nerve pressure and symptoms, will also be removed. The openings on the sides of the spine at this level will also be enlarged to allow adequate room for the nerve to exit.

I understand that the goal of this procedure is to help relieve the pain, numbness, and/or weakness in my neck, arm, hand, or other affected areas. However, 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.

I realize that during this procedure the affected disc and bone spurs are removed through an incision in the front of the neck. For additional stability in the spine, I understand that my surgeon will fuse the opened space with a bone graft and also place a metal plate secured with screws, at the fusion site. It has been explained to me that the bone used for the graft will be:

- Taken from my own hip
- Obtained from a bone bank

Alternatives

I have considered the non-surgical alternatives to anterior cervical discectomy, 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)
- Cervical-Traction Therapy (disc decompression)
- Performing exercises to strengthen the neck 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, spinal cord damage, or paralysis from the continued pressure on the nerves.
- 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

Risks of Anterior Cervical Discectomy with Fusion and a Metal Plate

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.
- **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** - Blood vessel damage to the carotid artery or jugular vein can occur, although very rarely.

- **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 at other discs above and below the level(s) of surgery. This is in part a consequence of the naturally occurring wear-and-tear that may have led to the present surgery
- **Death** - Although the risk is remote, death may occur during or soon after any surgical procedure.
- **Decreased motion of the neck** – The patient may have less motion or more stiffness in the neck after surgery.
- **Difficulty swallowing** - After surgery, you may experience difficulty swallowing or have the feeling that food or pills are getting caught in the esophagus (food pipe). This is often temporary and will get better, but may persist for long periods of time.
- **Failure of the instrumentation** - Breakage or dislodgement of the screws or plate can occur, which may necessitate another surgery to correct.
- **Failure of the procedure** - There is a chance that undergoing anterior cervical discectomy will not alleviate the patient’s pain, numbness, weakness, or other symptoms.
- **Failure of the vertebrae to fuse** - After the disc removal, the adjacent vertebrae may not fuse and may lead to spine deformity and/or pain (more likely to occur with smokers), possibly requiring further surgery.
- **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 injury** - There is a small risk of injury to the recurrent laryngeal nerve, which may cause temporary or permanent hoarseness of the voice, alteration in your voice tone, quality, or singing ability. Injury to the phrenic nerve could cause paralysis of the diaphragm.
- **Nerve root injury** - Injury to the nerve roots may result in weakness in the arm, paralysis in the affected muscle group, or loss of sensation 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 arms and legs that is complete or partial, temporary or permanent.
- **Recurrence** - There is the possibility that arm/neck pain or other symptoms could recur, requiring 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.
- **Stroke** - Though unlikely, there is a possibility that a stroke could occur during the procedure or in the recovery period, which could result from retraction and injury to the carotid artery.

Additional risks related to fusion with internal fixation

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

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 side of the thigh
- Changes or difficulty in walking
- Increased swelling/inflammation in the tissues around the graft site
- 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) is 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

Risks related to internal fixation (plating):

- Loosening, movement or breakage of the screws or plate, which may necessitate another surgery
- Positioning of the screws may cause injury to the surrounding structures
- Rare adverse/allergic reactions to the metal in the plate and screws, which would necessitate removal of the plate
- Formation of “too much” bone which may lead to symptoms of a pinched nerve

Important Points

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

Smoking - It has been explained to me that if I smoke in the days before or months 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, blood clots in the legs, pneumonia, and poor/incomplete bone healing which may necessitate further surgery.

Relief of Symptoms - Degenerative disc and joint disease of the neck will worsen with time, often with worsening symptoms. The main goal of surgery is to prevent nerve and spinal cord damage that doesn't get better and alleviate your symptoms to as great a degree as possible. It will **NOT** make your neck “brand new” and will not likely relieve 100% of your symptoms. Some pain, numbness, and/or weakness may persist even after the surgery is healed.

Lifestyle changes - It will be necessary to make significant changes in your lifestyle and work. Regular exercise (i.e. walking) should become a routine. Taking great care with bending, twisting, and lifting will be important and the realization that certain activities may no longer be easy to do or may cause you pain or re-injury to your spine.

I am aware and accept no guarantees about the results of the procedure have been made. I also recognize that an unforeseen condition may require my surgeon and his/her associates and assistants to use a different or additional procedure than the one described above.

Reaffirmation of Consent:

I authorize and direct Stephen R. Marano, MD, and his associates and assistants to perform an:

- Anterior cervical discectomy/spur removal.**
- Anterior cervical discectomy with fusion/plate.**

I understand that this procedure is intended to help relieve pain, numbness, and/or weakness and prevent permanent damage to the nerves and spinal cord that may be associated with Cervical Disc Disease.

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 Anterior Cervical Discectomy with Fusion and Insertion of a Metal Plate, 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 Anterior Cervical Discectomy with Insertion of a Metal Plate, if requested.

Signature of Patient or Legal Representative/Date

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

Print Name of Patient or Legal Representative/Date

Witness Signature/Date