# **Patient Instructions: Posterior Cervical Fusion**

# Surgical Technique

A posterior cervical decompression and fusion is a common surgical procedure to treat abnormal movement, pain and/or narrowing in the cervical spine (neck). Its goal is to relieve pressure on the spinal cord and nerve roots, or to help stabilize abnormal motion or neck instability. It is sometime used in conjunction with other surgery, such an ACDF (anterior cervical discectomy and fusion) to enable additional structural support and promote fusion of the bones in the neck. It is called posterior because the cervical spine is typically reached through an incision in the back of the neck (posterior means back). During surgery, the soft tissues and muscles of the neck are often separated using less-invasive techniques. The bone (called the lamina) overlying the spinal cord and canal is sometimes removed to remove pressure off the spinal cord and/or nerve roots (thereby completing the decompression), although this is not always needed. After removing any necessary bone (lamina) and performing microsurgery to decompress the spinal cord and/or nerves, small titanium alloy screws are placed in the bones that surround the spinal cord and attached to a titanium alloy rod. Also during this part of the surgery, chips of your own bone (taken during the decompression) or donor bone are placed alongside the exposed bones and around the titanium screws to help promote new bone growth with the goal of achieving bony fusion where the vertebrae fuse (grow / join) together. Occasionally, we need to extend fusion (including the screws and rods) up to the back of the skull, or down to the upper part of the thoracic spine (mid-back) depending on your specific condition. It usually takes a few months for the vertebrae to completely fuse, but can take up to a year or two. Please visit www.texspine.com for more information.

### **Before Surgery**

- Seven (7) days prior to surgery, do not take any anti-inflammatory medications or NSAIDS (Celebrex, Ibuprofen, Aleve, Naprosyn, Advil, etc.) as this could have adverse affects on your spinal fusion and cause prolonged bleeding in surgery.
- Do not eat or drink anything after midnight the day before surgery. This means nothing to drink the morning of surgery, except you may take your normal medications with a sip of water, if needed. This includes your blood pressure medicine, which in general should be taken. If you take insulin, consult your surgeon or primary care doctor about taking it before surgery.
- Check in on time the day of surgery. If you are late, your surgery may be cancelled.
- Bring your preoperative folder with you to the surgery and have it when you check in.
- If you have a copy of your MRI or x-rays, please bring these with you to the surgery even if your surgeon has already seen it or might have a copy. Surgery may be cancelled if we do not have your radiographic images.
- Please be aware that smokers are recognized to have a significantly higher risk of postoperative wound healing problems, as well as operative and postoperative bleeding. Smoking disrupts the normal function of basic body systems that contribute to bone formation. Smoking could result in higher nonunion rates. Smokers understand and must agree to discontinue smoking for at least two weeks before and after surgery. Although it helps to stop smoking for several weeks before and after surgery, cessation does not eliminate the increased risk resulting from long-term smoking.

## After Surgery

You may experience a lump feeling when swallowing, excessive phlegm production, or sore throat after anterior cervical spine surgery. Due to the nature of this approach and intraoperative manipulations, you may experience the following temporary side effects: dysphagia (difficulty swallowing) and hoarseness of voice. The degree of postoperative pain varies significantly, but patients usually have minimal pain at the incision site. It is more common for patients to experience pain at the base of the neck and between the shoulder blades from disc space distraction. Swelling in the throat area, swallowing difficulties, hoarseness and other side effects generally reach a peak between 2-5 days after surgery and will begin to subside. You may want to sleep with the head of the bed elevated for the first 5 days to minimize the symptoms.

## **Activity Level**

- Do not lift more than 10 pounds for the first 6 weeks after surgery. This may be increased to approximately 20 pounds after 6 weeks. Do not lift anything greater than 20 pounds for the first 3 months.
- Avoid prolonged upright sitting on hard surfaces or long car rides (more than 3 hours) for 2–4 weeks.
- You may drive after about a week and as soon as it is comfortable when no longer under the influence of pain medications. Avoid driving if you are in a rigid, form-fitted plastic collar.
- Limited bending or twisting of the cervical spine is advised. If physical therapy has been prescribed, you are not to perform range of motion, flexion, extension or lateral bending until fusion is documented.
- If a hard collar is prescribed, it should be worn at all times, except while showering and should be replaced immediately thereafter.
- Avoid activities with the potential for falling or physical contact until cleared by your surgeon.
- Start walking as soon as possible after the surgery. Walking helps to prevent blood clots and increases muscle strength.

# **Bandage**

- Bandage (if present) may be removed the second day following surgery.
- Steri-strips should be left intact on the incision until returning to the clinic for your postoperative follow-up visit 21 days following surgery.
- If the steri strips begin to peel off, it is ok to remove them.

#### **Bathing**

- You may shower the fourth day following surgery.
- Try to limit showers to no more than 5-7 minutes.
- Do not scrub the wound. Let water run over the incision, then pat dry with clean towel.
- Do not soak in bathtub, hot tub or pool for at least 2 weeks.

#### Diet

- •Narcotic pain medications are very constipating; be proactive with stool softeners and laxatives.
- A high fiber diet is recommended.
- Avoid straining on the toilet. Keep stools soft with a high fiber diet and/or use of prune juice, Metamucil, Fiber One cereal, etc.

#### **Pain Medications**

- Do not take NSAID medications (Ibuprofen, Naprosyn, etc.) or Cox-2 inhibitors (Celebrex, etc.) for 3 months following surgery.
- Tylenol can be taken for pain as needed.
- If Tylenol does not adequate reduce pain, narcotic pain medications are prescribed.
- Do not allow pain get out of control before taking medication or it will be less effective.
- We will not refill pain medications over the weekend or after hours. Anticipate the need for medication refills.

# Follow-up

- Call Dr. Josey's office (512-476-2830) and schedule your routine postsurgical visit for 21 days after surgery, if it has not already been scheduled. Other follow-ups will be scheduled as needed. OSA generally follows its patients for 1-2 years after surgery.
- Please call your physician's office immediately with any problems, or go to the emergency department with progressive difficulty swallowing, difficulty breathing, significant neck swelling, new numbness or weakness, fever greater than 101.0 degrees or any other concerns.

### Other FAQs

How long will I be in the hospital? This varies depending on the type of surgery performed. For single level surgeries, you may go home the day of the surgery or you may spend the night. For two and three level surgeries, you will likely spend the night in the hospital and go home the following day. You and Dr. Josey will decide on the best course of action.

*How much time off from work?* The amount of time needed to recover prior to returning to work varies and depends on the surgery, your job and you as an individual. Typically, 2-3 week is sufficient. However, patients should ask their surgeon for an individual recommendation. For jobs requiring lifting and physical exertion, more time will be required.

When can I resume driving? Driving is acceptable approximately 2-3 weeks after surgery depending on the use of pain medication. We generally recommend that you not drive while taking pain medications following surgery. Driving after an posterior cervical fusion must be done carefully as we do not recommend excessive turning of the head and neck. If you have a plastic or fitted hard collar, it is not recommended that you drive because the collar can significantly limit your ability to turn your head.

Will I wear a cervical neck collar? The use of a cervical neck collar varies depending on the surgeon and the patient. Most patients will not need a collar. If a collar is needed, it will be provided on the day of surgery. If prescribed by Dr. Josey, the collar should be worn at all times, except while showering and should be replaced immediately thereafter.

Will I need pain medications? We will prescribe pain medications and other peri-operative medications on the day of surgery or prior to your discharge from the surgery center or hospital.

Will I need Physical Therapy? We usually will not recommend physical therapy until postop month #3. We usually recommend no range of motion (ROM) exercises for 3 months or until your surgeon determines that your fusion is solid. Refrain from whiplash like motions, high impact activities such as running or horseback riding, or any radical side-to-side motions. A good rule of thumb is, 'If it hurts don't do it'.

What kind of follow-up is required? Patients return to our office for routine follow up appointments at intervals that are determined on a case-by-case basis. We typically see patients back in the office within three weeks following surgery. We will see you again at 6 and 12 weeks after surgery, then increase this to several months followed by an annual exam. Your individual needs will be determined by your surgeon at each followup visit.

Do I need antibiotic prophylaxis for dental procedures? YES if you have dental work done within 24 months of the fusion. We recommend avoiding routine dental prophylaxis and simple procedures for 3 months following a spinal fusion, but between 4 and 24 months we suggest antibiotic prophylaxis. After 24 months, you will not need antibiotic prophylaxis unless you have a compromised immune system, Type 1 diabetes mellitus, previous infection of a prosthetic joint or a spinal fusion, hemophilia, or malnourishment. The choice of antibiotic is a decision for you and your primary care doctor. Please contact their office for antibiotics or further advice. We are happy to discuss this with them should they need to contact us. If you have significant immune compromise, Type 1 diabetes mellitus, history of previous infected spinal fusions or joint replacements, hemophilia or malnourishment then we suggest antibiotic prophylaxis for ALL future dental procedures regardless of timing, but this again is something that needs to be resolved through your primary care physician and not your spine surgeon. If there is any confusion please have them call us.