Posterior Cervical Laminectomy

A Patient's Guide to Posterior Cervical Laminectomy

Introduction

Most neck pain is due to degenerative changes that occur in the intervertebral discs of the cervical spine and the joints between each vertebra. The vast majority of patients who have neck pain will not require any type of operation. However, in some cases degenerative changes in the cervical spine can lead to a very serious condition where there is too much pressure on the spinal cord. When this condition occurs, the entire spinal cord is in danger. One surgical option is to remove the pressure on the spinal cord by opening the spinal canal from the back to make the spinal canal larger. This procedure is called a laminectomy.

The purpose of this information is to help you understand:

- The anatomy of the cervical spine
- The rationale for performing a posterior laminectomy
- What you can expect from this procedure

Anatomy

In order to understand your symptoms and treatment options, you should start with some understanding of the general anatomy of your neck. This includes becoming familiar with the various parts that make up the neck and how these parts work together.

If you have not already done so, please review the document, entitled:

- Cervical Spine Anatomy
Rationale

If spinal stenosis is the main cause of your neck pain, then the spinal canal must be made larger and any bone spurs pressing on the nerves must be removed. One way that this is done is with a complete laminectomy. Laminectomy means "remove the lamina".

The lamina is the back side of the spinal canal and forms the roof over the spinal cord. Removing the lamina gives more room for the nerves and allows the removal of bone spurs from around the nerves. A laminectomy reduces the pressure on the spinal cord and the irritation and inflammation of the spinal nerves.

The Operation

To perform a cervical spine laminectomy, an incision is made down the center of the back of the neck. The muscles are then moved to the side. The arteries and nerves in the neck are protected as well.

Once the spine is reached from the back, each vertebra is identified. Your surgeon will probably take an X-ray during surgery to make sure that the right vertebrae are being selected and the correct lamina removed. Once this is determined, the lamina of the affected vertebrae is removed. Any bone spurs that are found sticking off the back of the vertebra are removed as well. Great care is taken to not damage the spinal cord and nerve roots.

In the cervical spine, removing the lamina completely may cause problems with the stability of the facet joints between each vertebra. If the joints are damaged during the laminectomy, the spine may begin to tilt forward causing problems later. One way that spine surgeons try to prevent this problem is not to actually remove the lamina. Instead, they simply cut one side of the lamina and fold it back slightly. The other side of the lamina opens like a hinge. This makes the spinal canal larger, giving the spinal cord more room. The cut area of the lamina eventually heals to keep the spine from tilting forward.

You will probably need to be placed in some sort of brace after surgery to hold your head perfectly still while the healing occurs. For a complete understanding of different types of spine braces and to understand what a "halo jacket" is, you may wish to review the document, entitled:

- Back and Neck Braces

Rehabilitation

- Neck Rehabilitation

Complications

With any surgery, there is a risk of complications. When surgery is done near the spine and spinal cord these complications (if they occur) can be very serious. Complications could involve subsequent pain and impairment and the need for additional surgery. You should discuss the
complications associated with surgery with your doctor before surgery. The list of complications provided here is not intended to be a complete list of complications and is not a substitute for discussing the risks of surgery with your doctor. Only your doctor can evaluate your condition and inform you of the risks of any medical treatment he or she may recommend.

To understand more about the potential complications of spinal surgery please review the document, entitled:

- Complications of Spinal Surgery