Lumbar Corpectomy

Brief description of the procedure

Surgical procedure in which vertebral bone and intervertebral disc material is removed to relieve pressure on the spinal cord and spinal nerves (decompression) in the lumbar spine.

Disorders it treats

Spinal cord decompression; spinal stenosis or spinal fracture, tumor, or infection that is causing compression. However, in order to do so generally involves removing nearly the entire vertebral body and disc, which must be replaced with a piece of bone graft and mended (fused) together to maintain stability. A small metal plate with screws may also be used to add additional stability. Patients with a severe spinal problem or instability may also require a posterior spinal fusion with metal instrumentation in addition to an anterior corpectomy and fusion. If necessary, the second surgery is typically performed in a staged fashion 1-4 days after the first anterior surgery.

Possible Post-Op findings

Most patients experience only mild discomfort at the operative site, which is generally well controlled with oral pain medicines. Patients may notice immediate improvement in some or all of their symptoms, however, some symptoms may improve only gradually. A successful outcome will depend on your compliance with the health care provider's recommendations, and a realistic expectation for meeting the goals of surgery (which depend on one's condition preoperatively).

Since cigarette smoking dramatically impairs bone healing, smoking cessation will significantly improve the likelihood for a successful fusion.

Factors influencing recovery

Slower healing rate caused by i.e. diabetic, smoker, old age, osteoporosis, obesity, and malnutrition.
If you had a fusion, do not use non-steroidal anti-inflammatory drugs (NSAIDs) (e.g., aspirin; ibuprofen, Advil, Motrin, Nuprin; naproxen sodium, Aleve) for 6 months after surgery. NSAIDs may cause bleeding and interfere with bone healing.

Brace (Y/N)

Patients are generally not required to wear a back brace after surgery. Occasionally, some patients may be issued a soft or rigid lumbar corset that can provide additional thoracic and/or lumbar support in the postoperative period, if necessary. Your surgeon will inform you of this.

How long?

If needed, up to two months.

Driving restrictions (Y/N)

Patients may begin driving when the pain has decreased to a mild level, which usually is between 2-6 weeks after surgery. Patients should not drive while taking pain medicines (narcotics). When driving for the first time after surgery, patients should make it a short drive only and have someone come with them, in case the pain flares up and they need help driving back home. After patients feel comfortable with a short drive, they can begin driving longer distances alone.

Physical Therapy Needed?

Yes, Physical Therapy will play an important role in your recovery process and will start while you are in the hospital after your surgery. Physical Therapy will also be provided during your recovery at home and when you go to Outpatient therapy.

PT restrictions

Before patients go home, physical therapists and occupational therapists work with patients and instruct them on proper techniques of getting in and out of bed and walking independently. Patients are instructed to avoid bending at the waist, lifting (more than five pounds), and twisting in the early postoperative period (first 2-4 weeks) to avoid a strain injury. Patients can gradually begin to bend, twist, and lift after 4-6 weeks as the pain subsides and the back muscles get stronger.

PT objectives

Physical Therapy will initially focus on safety. A Physical Therapist will train you how to safely and correctly get up out of bed and will explain your restrictions. Late, you will start a strengthening program, specifically designed for you which will include leg strengthening and spine/CORE strengthening exercises. During the final phase of your

recovery, the Physical Therapist will also guyide you back to an active lifestyle where you will understand the restrictions of your condition, while maintain an active lifestyle.

PT Objectives
Strengthening, Coordination, Proprioception exercises at first. Later on gentle AROM exercises will be added. US/E-stim as indicated

Work/Hobby restrictions

Patients may return to light work duties as early as 6 weeks after surgery, depending on when the surgical pain has subsided. Patients may return to moderate level work and light recreational sports as early as 3-4 months after surgery, if the bone has healed, the surgical pain has subsided, and the back strength has returned appropriately with physical therapy. Patients who have undergone an anterior thoracic or lumbar corpectomy and fusion generally should not be permitted to return to heavy lifting and sports activities.

Incision Care

You may shower 1 to 4 days after surgery. Follow your surgeon's specific instructions. No tub baths, hot tubs, or swimming pools until your health care provider says it's safe to do so. If you have staples or stitches when you go home, they will need to be removed. Ask your surgeon or call the office to find out when.

When to call your surgeon

If your temperature exceeds 101° F, or if the incision begins to separate or show signs of infection, such as redness, swelling, pain, or drainage. If your swallowing problems interfere with your ability to breathe or drink water.

Follow up with surgeon

Patients will return for a follow-up visit to see the Surgeon 12-14 days after surgery. The incision will be inspected. There may or may not be sutures to be removed. Medications will be refilled if necessary. Patients will usually return to see the Surgeon every 4-6 weeks thereafter, and an x-ray will be taken to confirm the fusion area is stable and healing appropriately. If necessary, home physical therapy may be prescribed to improve a patient's walking ability. At 8-12 weeks after surgery, patients will be given a prescription to begin physical therapy for gentle back exercises.

Outcomes:

The results of anterior thoracic/lumbar corpectomy and fusion surgery are generally good and successful. However, the risks are higher than many other types of spinal surgery because patients who require this type of surgery often have a severe spinal condition (tumor, infection, etc.). In addition, patients are frequently older and have other significant medical problems. A number of research studies in medical journals demonstrate greater than 70% good or excellent results from anterior thoracic/lumbar corpectomy and fusion surgery for various spinal conditions. Most patients are noted to have significant improvement of their back pain and ability to walk and function after surgical intervention. Patients with a preoperative spinal cord injury or neurologic deficit may not improve following surgery, however, a thorough anterior decompression and stabilization generally provides the best chance at neurologic recovery (if there is a large anterior compressive lesion) as opposed to posterior surgery or non-operative treatment.