Thoracic 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 thoracic spine.
In order to decompress the neurologic structures, generally nearly the entire vertebral body and disc are removed, 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.

Disorders it treats

Spinal cord decompression; spinal stenosis or spinal fracture, tumor, or infection that is causing compression

Possible Post-Op findings

Following a thoracic corpectomy and fusion, you may notice an immediate improvement of some or all of your symptoms; other symptoms may improve more gradually. The amount of time that you have to stay in the hospital will depend on your treatment plan. You typically will be up and walking in the hospital by the end of the first day after the surgery. How quickly you return to work and your normal activities will depend on how well your body heals and the type of work/activity level you plan to return to.

Work closely with your spinal surgeon and your physical therapist to determine the appropriate recovery protocol for you, and follow the instructions to optimize the healing process.

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.

How long?

If needed 2 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, If necessary, home physical therapy may be prescribed to improve a patient's walking ability.

PT Objectives

Physical 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. Your Physical Therapist will also design an individualized strengthening/conditioning program for you.

PT modalities

Strengthening, Coordination, Proprioception exercises at first. Later on gentle AROM exercises will be added. US/E-stim as indicated. No AROM/PROM or PIVM until 8 weeks after surgery.

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 surgeon 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

Patients will return for a follow-up visit to see the doctor approximately 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.

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.