

# **TLIF or Transforaminal Lumbar Interbody Fusion**

## **Brief description of the procedure**

The Trans Foraminal Interbody Fusion or TLIF fuses the anterior (front) and posterior (back) columns of the spine through a single posterior approach.

## **Disorders it treats**

Spondylolisthesis, Spondylolysis, Spinal Stenosis, Segmental Instability, DDD, Disc Herniation, Spinal Tumor, Vertebral Fracture

## **Possible Post-Op findings**

Most patients are usually able to go home 3-5 days after surgery. This lateral approach reduces the amount of surgical muscle dissection and minimizes the nerve manipulation required to access the vertebrae, discs and nerves. The TLIF approach is generally less traumatic to the spine, is safer for the nerves, and allows for minimal access and endoscopic techniques to be used for spinal 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 required to wear a back brace after surgery.

## **How long?**

3 months

## **Driving restrictions (Y/N)**

Patients may begin driving when the pain has decreased to a mild level, which usually is between 7-14 days 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 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 and twisting of their back in the acute postoperative period (first 4-6 weeks). Patient will also receive CORE strengthening exercises for the lumbar region to help improve the patient's posture and help restore muscle balance. Functional activities will be reviewed as well.

### **PT restrictions**

Needs to wear brace except for when in bed. Posterior panel needs to be worn for the first 4 weeks.

### **PT objectives**

Increase lumbar CORE strength. Teach proper posture and proper ergonomics and body mechanics. Teach patient HEP for CORE and for CARDIO. Strengthen lower back to allow patient to function without the brace. Get patient to join a local YMCA or gym.

### **PT modalities**

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 2-3 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 months after surgery, if the surgical pain has subsided and the back strength has returned appropriately with physical therapy. Patients who have undergone a fusion at only one level may return to heavy lifting and sports activities when the surgical pain has subsided and the back strength has returned appropriately with

Physical Therapy. Patients who have undergone a fusion at two or more levels are generally recommended to avoid heavy lifting, laborious work, and impact sports.

### **Incision Care**

Patients can shower immediately after surgery, but should keep the incision area covered with a bandage and tape, and try to avoid the water from hitting directly over the surgical area. After the shower, patients should change the bandage, and dry off the surgical area. The dressing should otherwise be changed every 2-3 days when at home. Patients should not take a bath until the wound has completely healed, which is usually around 2 weeks after surgery.

The wound area should remain covered with a gauze bandage secured in place with tape. The area should be kept clean and dry. The bandage should generally be changed every 1-2 days, especially after showering. 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 with surgeon**

Patients will return for a follow-up visit to see the doctor approximately 12-14 days after surgery. The incision will be inspected. The incision will be inspected and the stitches or staples will be removed. Medications will be refilled if necessary. Patients will usually return to see their surgeon every 4-6 weeks thereafter, and an x-ray will be taken to confirm the fusion area is stable and healing appropriately. At 8-12 weeks after surgery, patients will be given a prescription to begin physical therapy for gentle back exercises.

### **Outcomes**

The results of posterior lumbar interbody fusion (PLIF) and transforaminal lumbar interbody fusion (TLIF) surgery in the treatment of symptomatic spondylolisthesis and degenerative disc disease are generally excellent. Numerous research studies in medical journals demonstrate greater than 90-96% good or excellent results from PLIF and TLIF surgery. Most patients are noted to have a significant improvement of their back pain and return to many, if not all, of their normal daily and recreational activities.

