



# Transforaminal Lumbar Interbody Fusion (TLIF)

# WHAT DOES SURGERY ENTAIL?

This is a surgery where we make an incision in the middle of the back. After splitting the muscle to access the bones that protect your nerves, we remove a small amount of bone to see your nerves and the fluid filled sac that holds your nerve rootlets. Once we are sure that you have no more pressure on your nerves from bone spurs or soft tissues the decompression part of the procedure is complete. We then move on to the stabilization portion of the procedure. This involves placing a cage into the disk space between the vertebrae we are attempting to fuse and then screws and rods to connect the bones. The screws and rods act as an internal brace as your body slowly begins to form bone through the cage connecting the bones completing the fusion. The completion of the fusion generally takes around a year to complete.

# WHAT IS THE LIKELIHOOD THIS PROCEDURE WILL HELP MY PROBLEM?

This depends on your symptoms. The more buttock/leg/foot discomfort you have the more recovery you will have in general. Back pain is something that is difficult to predict will improve following surgery because there are many different causes of back pain that are not treated effectively with surgery. The goal of surgery is to take the pressure of the nerves. This helps very much with buttock and lower extremity symptoms but because there are many other causes of back pain that have nothing to do with the degenerative disks or pressure on the nerves, back pain relief is unpredictable. I generally advise patients that their buttock/lower extremity discomfort will improve significantly but any improvements in back pain is a bonus. The more lower extremity/buttock pain you have relative to back pain, the better patients tend to do. Patients will tend to have some aspect of back pain following this procedure since we must enter through the muscles of the back.

## WHAT ARE THE RISKS OF SURGERY?

There are risks to any surgery. Life altering complications such as death, paralysis, and stroke are exceedingly rare. People generally have some degree of back pain following surgery because we do have to dissect through the muscles of the back. This varies by person. Rarely, there can be bleeding in the back that can sudden weakness in the legs or difficulty urinating (you feel the urge to urinate but cannot initiate urination). If this happens, please call our clinic immediately. The other risk that cannot be predicted is in the process of removing pressure off the nerves, a hole in the fluid filled sac that holds the nerve rootlets may occur. This is called a spinal fluid leak. If this occurs, I must repair or patch the hole and may need to keep you overnight in the hospital for observation. but if this happens it will almost always happen while you are still in the hospital. The risk of infection is less than 1% and typically occurs within the first couple weeks following surgery if it occurs. The odds of an infection rise with obesity, smoking, and poorly controlled diabetes. The goal of surgery is to fuse bones together. This generally takes about a year to complete. Fusion rate is upwards of 90%+ but patient specific factors such as obesity, smoking, diabetes, and severe osteoporosis decrease those odds and may necessitate further surgery. The risk of future surgery at an area above or below the fusion is about 20%.





## HOW LONG DOES THE SURGERY TAKE?

Surgery generally takes a couple hours once the procedure starts but it can vary when you add in the time for anesthesia to put you to sleep and wake you back up.

## WHAT IS THE FOLLOW-UP PROTOCOL?

We will have your follow-up at 6 weeks, 3 months, 7 months, and 1 year following surgery. If problems arise and you would like to be seen sooner, please contact our office. Occasionally we will close your wound with staples and if that occurs, we will see you back in the office at 2 weeks for staple removal.

## HOW LONG IS THE RECOVERY AFTER SURGERY?

The overall recovery following surgery is about 1 year. The reason it is 1 year is that is about how long it takes for nerves to heal themselves to their full potential. Some people have permanent nerve damage from the degree or duration of compression that they have had and that may be a reason why full recovery is not achieved. But in general, how you feel at 1 year is how you will feel long-term. You will feel the initial post-operative soreness for at least a few weeks after surgery and that is generally how long it can take to return to desk/office type work. More physical work may require up to 6 weeks recovery to feel up to that level of activity. We will follow the progress of your fusion with x-rays, which takes about a year to complete.

#### WHAT ARE MY RESTRICTIONS AFTER SURGERY?

After surgery, it is generally no lifting more than 20 lbs until your first post-operative visit. This allows you do perform almost all usual household and self-care duties. The first 6 weeks are to allow your body to heal and recover from surgery so lifting more than that is not necessary, particularly bending and twisting.

## DO I NEED A BRACE?

In most cases no. We will specifically speak to you if you do require a brace and give specific instructions on brace wear/care.

# HOW MUCH PAIN WILL I HAVE AFTER SURGERY?

Your back is going to hurt after surgery for a minimum of 4 weeks. This is from the muscle dissection required to take the pressure off your nerves. We will supply you with pain medication following surgery. It is not uncommon to have good days and bad days with your leg(s) following surgery. Some days you may feel great, other days you may feel like you did before surgery. This is part of the normal recovery process of the nerves. In general, pain improves first but other symptoms like numbness or weakness can take much longer to improve if at all.





## WHEN CAN I DRIVE?

When you are off prescription pain medication/muscle relaxers during the day.

## HOW DO I CARE FOR MY SURGICAL INCISION?

When you are leave the hospital, you will have already had your bandage changed. Please keep the bandage that you left the hospital with on for 3 days and then you can remove the bandage and shower normally. You will have butterfly strips over their incision which was sealed with glue. These strips will fall off as you shower. If they are not off in 1 week after surgery, please pull them off. Once you have showered for the first time, you should keep the incision covered for a week or two as it heals so it does not rub on your clothing. If you experience any drainage from the wound, please take a picture of the wound and email/call our office to evaluate it. If you have staples you can also shower 3 days after surgery. No baths or pools until you come into clinic for evaluation.

## DO I NEED PHYSICAL THERAPY?

For the first 6 weeks after surgery, we want your body recover from surgery. Stick to the lifting restriction and refrain from frequent bending/twisting at the waist. If you would like to be involved in some gentle exercise such as going for a walk that is fine and you can walk as much as you feel comfortable. Formal physical therapy can be discussed at the first post-operative visit, but we need your muscles to heal.

## WHAT WILL I NEED FOR PAIN MEDICATION?

Every patient should take 1000mg of Tylenol (2 extra strength over the counter Tylenols) 3x a day. We will also send you home with opioid pain medication and a muscle relaxer that you should take sparingly and only as needed (2-3x/a day maximum). If you are taking the opioids be sure to take a stool softener to prevent constipation. You may only need the opioids for a couple weeks. Do **not** take NSAIDs for 6 months following surgery since it decreases fusion rate.