

## **Lateral Lumbar Interbody Fusion (LLIF)**

### **Understanding Your Risks**

This document outlines the potential complications associated with **lateral lumbar interbody fusion (LLIF) with posterior pedicle screw fixation**. This is a minimally invasive spine procedure in which the disc is removed through a small incision in the patient's side, and a spacer (interbody cage) filled with bone graft is placed between the vertebrae and placement of screws and rods through small incisions in the back. **The usual purpose of surgery** is to relieve nerve compression, restore disc height, spinal stability, alignment, and promote solid fusion in patients with conditions such as degenerative disc disease, spinal stenosis, spondylolisthesis, deformity, or instability.

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#### **Risks:**

- **Transient neurological symptoms** (thigh/groin pain, numbness, hip flexor weakness)
- **Persistent neurological deficit** (including femoral or non-femoral neuropraxia, motor neural injury)
- **Psoas muscle weakness**
- **Sensory nerve injury** (majority transient)
- **Musculoskeletal (MSK) complications** (cage subsidence, endplate injury, facet violation)
- **Wound infection** (superficial/deep)
- **Pseudoarthrosis** (nonunion)
- **Hardware complications** (screw misplacement, loosening, breakage, connecting rod issue, cage migration)
- **All-cause reoperation**
- **Ileus**
- **Psoas hematoma**
- **Dural tear and cerebrospinal fluid leak**
- **Pneumothorax**

- **Aborted interbody placement**
- **Visceral injury** (bowel, ureter)
- **Major vascular injury**
- **Anterior longitudinal ligament rupture**
- **Medical complications** (myocardial infarction, stroke, pneumonia, pulmonary embolism, deep vein thrombosis)
- **Death** (extremely rare)

**Risk Factors for Increased Complications:**

- **Higher number of fused segments**
- **Previous lumbar surgery**
- **Advanced age, higher ASA class, and comorbidities** (diabetes, tobacco use obesity, COPD, disseminated cancer)

**Patient Acknowledgment:** By signing below, the patient acknowledges understanding of the above risks associated with lateral lumbar interbody fusion with posterior pedicle screw fixation and all questions have been answered to the patient's satisfaction.

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_ **DOB:** \_\_\_\_\_

