

## Lumbar Spine Decompression & Discectomy Operation – Benefits & Risks (Version 5 / 2020)

This is a surgical procedure of mild to moderate complexity, regularly performed by me (performed > 1000 numbers). Patient Outcome - Satisfied or Very Satisfied > 90%

### Intended Benefits of Surgery -

- **Main aim is to reduce Leg pain** - Right / Left / Both (70-75% experience a significant improvement, 20% - Pain better but still have some residual leg pain, 5% no benefit at all, 1% - worse in terms of pain); **Not aimed to relieve Back pain**, but more than 50% could have partial improvement of back pain.
- **To improve Walking distance & Claudication Pain** associated with walking. (In patients suffering from Spinal Stenosis)
- **Partial or No Improvement of Weakness of muscle power** – tends to varies & improvement is gradual (could take from a few weeks to 18 months).
- **Numbness – No or Partial Improvement** (If improve, Numbness mainly recovers gradually after a few weeks & can improve up to 18 months post-surgery).

### Frequently occurring Risks -

- Irritation to the nerve roots – can result in a temporary increase in tingling sensation or numbness or weakness (about 5%)
- Minor Wound healing problems & reaction to skin sutures (3%) needing repeated wound care and Dressings.
- Difficulty to pass urine in the post-surgery period (due to pain, difficult to mobilise, etc.) & *needing Urinary Catherisation for a day or few.*
- Puncture / Tear / Bruising of the membrane (dura) covering the nerves (4%) causing spinal fluid leak, headache, wound problem, re-surgery & increased hospital stay
- Some Increase in Back pain. In 2 out of 10 patients the severity of pain could be moderate or severe with decreased mobility. The pain could last for few weeks or months, depending on the amount of disc tissue lost & the healing of the remaining disc. About 20% can develop mild to moderate chronic back pain.
- Blood Loss – bleeding during or after surgery – The blood loss is about 100 to 500 ml (for single level surgery), 300 ml to 800 ml (Two level surgery); Need for blood transfusion is very rare in single level surgery and occasionally in two levels surgery. Risk of Haematoma formation & nerve compression (<1%).
- Need for Repeat surgery or Spinal injections (about > 20% in 8 years) – Due to recurrent disc prolapse (5% to 8%) or gradual worsening of Spinal arthritis or Spinal Canal narrowing, Scaring around the nerve roots & others. All these sequelae can lead to recurrence or Increase in back or leg pain.

### Occasionally occurring Risks -

- Blood clots in leg (deep vein thrombosis about 1 to 2%) & dislodging to the lung (pulmonary embolism, Very rare). Please refer to other sources- how to avoid these risks.
- Surgical site Infection (Rare, less than 0.3% in the last 7 years); Additional Risks of Covid-19 infection (as mentioned in Covid-19 Consent form).
- Risk of General anaesthesia – Nausea & Vomiting; Cardiac, Respiratory & other Medical complications – Risks increase with age & additional co-morbidities.
- Due to Face down(prone) position during surgery, could lead to pressure area Bruises in face, Trunk, legs. Very rarely injury to the eyes.
- Damage to Nerve - resulting in permanent numbness & weakness of the legs (feet & the toes) (1%), Bladder / Bowel / Sexual dysfunction (1%)
- Wrong level surgery (adjacent level) commonly due to varied anatomical & radiological factors and other reasons (0.2%)

### Very Rare & Serious Risks (None in my practice)

- Severe damage to spinal nerves – resulting in severe paralysis & numbness of both legs, bowel and bladder (very rare) (none in my practice)
- Vascular injury to major abdominal blood vessels – causing serious bleeding (very rare) (none in my practice)
- Death (very rare) (none in my practice). Currently the risk could be **higher with Covid-19 Pandemic.**

### Anaesthesia & Hospital stay

- *Carried out under General anaesthesia as inpatient procedure; Duration of surgery for single level is about 90 minutes & additional 1 hr for each additional level.*
- *Average Hospital stay – one night (about 24 hours) for single and 2 level surgery, occasionally could extend to 2 to 3 days*
- *Duration of hospital stay can increase to 3 - 7 days if membrane covering the spinal nerves are breached - 1 to 3 days of complete bed rest / need Urinary Catherisation*

### Average Recovery Time Scale –

- Varies from 6 weeks to 3 months - to feel confident and comfortable for most regular light activities of daily living
- Start walking exercises of short duration after few days; To build endurance gradually. Gentle & light exercises after 3 weeks; Start swimming exercise after 4 weeks.
- Return (phased return) to - light duties in 8 to 12 weeks; Moderate duties in 3 to 6 months; Need to take appropriate precaution forever regarding care to the spine.